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MIND

A QUARTERLY REVIEW

OF

PSYCHOLOGY AND PHILOSOPHY.

EDITED BY

PROF. G. E. MOORE,

WITH THE CO-OPERATION OF PROF. F. C. BARTLETT AND C. D. BROAD, LITT.D.

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PSYCHOLOGY AND PHILOSOPHY

I.—TWO PROBLEMS ABOUT DUTY (II.).

BY W. A. PICKARD-CAMBRIDGE.

II.

IDEAL UTILITARIANISM AND INTUITIONISM.

OUGHT ideal Utilitarianism to be abandoned for the type of Intuitionism advocated by the Provost of Oriel? ¹

The ideal Utilitarian analyses all duty into duty to promote the highest good: any particular right act is right because it conduces most efficiently to this end, or works out best. Any particular kind of act that is *prima facie* or generally speaking right, is so because *prima facie* (or generally speaking) it leads to the best results, while the failure to perform it leads to inferior or evil results: and if in any particular circumstances a conflict arises between such *prima facie* duties, the solution is always to be sought by asking which act in these circumstances will really do the most good.

Intuitionism is apt to brush aside this attempt to distinguish right acts from wrong by a comparative valuation of them and of their results as unworkable and unnecessary. It is unnecessary because we know at sight that certain kinds of act are right or are duties in themselves, in virtue of their own nature and quite irrespective of the quality of any consequences they may have. The particular form of intuitionism advocated by the Provost differs from some earlier forms (*e.g.* from the intuitionism

¹ *The Right and the Good*, by W. D. Ross.

of Kant) in two important respects. He recognises (1) that it is only *prima facie*, not absolutely, that we know this or that kind of act to be always obligatory: and (2) that at least some acts are always thus *prima facie* obligatory because they promote the most good. At the same time he rejects as firmly as Kant the suggestion that 'ideal Utilitarianism' is true, whether it purports to state the general ground of the intuition that certain kinds of act are always *prima facie* obligatory, or the proper method for solving the conflict between such *prima facie* duties, should one arise. Further, he thinks ideal Utilitarianism not only unnecessary but positively misleading, because cases can easily be found, or imagined, in which of two alternative acts (A and B) A is certainly right, though the balance of good results is on the side of B.

According to the Provost's theory we have not one intuition only, informing us for certain that it is an absolute duty always to do such and such kinds of act, but rather two separate kinds of intuition:

(1) An intuition of the invariable *prima facie* obligation to do acts of such and such kinds, always and everywhere. This we apprehend for certain. Like the *voûs* of Aristotle, this first kind of intuition is a form of knowledge: the *prima facie* rightness of an act is self-evident, and, like mathematical truth, does not admit of proof, but does not require it.¹ At the same time it does not tell us that anything is our duty really and in fact in the situation in which we stand, but only that such and such a kind of act is our duty *prima facie*,² or *tends* always to be a duty,³ or that it is a 'conditional' duty,⁴ i.e. that a given act, being of that kind, always would be a duty, were it not sometimes also of some other kind, rendering it *prima facie* wrong.⁵

(2) An intuition of the actual or absolute duty to do this or that particular act in this or that particular situation. This kind of intuition, like the decisive *αἰσθησις* of Aristotle, gives no knowledge but only a 'more or less probable opinion'.⁶ We can never be certain that it is right, nor yet that it is wrong.⁷ Even at its best, it is 'highly fallible'.⁸

(i) As examples of the kinds of act that *prima facie* are self-evidently duties we are given the following:—⁹

(1) The duty of *fidelity*—to keep a promise, no matter from what motive.¹⁰

¹ *Op. cit.*, pp. 29-30 top; 32 foot.

⁴ P. 19.

⁶ P. 42 top.

⁵ P. 19.

⁹ P. 21 fol.

² P. 19.

⁶ Pp. 31, 33.

¹⁰ P. 22.

³ P. 28

⁷ P. 31.

(2) The duty of *reparation*—to make amends for a wrongful act.

(3) The duty of *gratitude*—to return services, no matter from what motive.¹

Next (4) A general duty to 'produce as much good as possible',² or 'seek the good of all men',³ having three specific sub-forms:—

(a) the duty of *justice*—negatively, to correct or prevent the ill-proportion of happiness to merit which is commonly found; or positively, to apportion happiness to merit, or to 'virtue'.⁴

(b) The duty of *beneficence*—to improve others in virtue, intelligence or pleasure.

(c) The duty of *self-improvement*—to improve ourselves in virtue or intelligence. (Whether we have a duty to get pleasure for ourselves is more doubtful; but it seems we have, if we think of our own pleasure, not as *our own*, but rather as so much *pleasure*, or so much objective good.)

(5) The duty of *non-maleficence*—not to injure others, a duty which is *prima facie* more binding than the duty to improve them.

These duties arise in different ways, some (nos. 4 (a), (b), (c) and 5) from the general duty to produce as much good as possible; others (nos. 2 and 3) from acts (*viz.* infliction of injuries or acceptance of benefits) 'not essentially meant to create such an obligation';⁵ and one (*viz.* no. 1) from acts (*viz.* promises) which were definitely so meant.⁶

The list of duties itself may or may not be complete;⁷ but at least this analysis of their origins or grounds is claimed to be so: 'These seem to be, in principle, all the ways in which *prima facie* duties arise'.⁸ Of course these are often 'compounded together in highly complex ways'.⁹ The same act may tend

¹ Pp. 22-23.

² Pp. 26-27 top.

³ P. 30.

⁴ P. 27 top.

⁵ P. 27.

⁶ P. 27.

⁷ P. 23; one or two gaps suggest themselves in the list of duties. There is (*e.g.*) no mention made of the duty to preserve life or maintain *health*, in oneself or in others, but only virtue and intelligence (for both), and pleasure (for others, less obviously for oneself). Presumably this, however, would likewise fall under the general *prima facie* duty to produce as much good as possible.

⁸ P. 27 foot. But is this list quite complete either? Where in it are we to place what we are told (p. 54) is the ground of the 'peculiar stringency of the duty of veracity', *viz.* the 'implicit understanding that language shall be used to convey the real opinions of the speakers'? Or is this understanding to be interpreted as a sort of 'promise'?

⁹ *Ibid.*

to be a duty on a number of different grounds : *e.g.* (1) the duty to obey one's country's laws is compounded partly of gratitude, partly of a promise of obedience implied in residence, partly of the duty to promote general good (when the laws make for the general good). So (2) the duty of justice is reinforced by the feeling of responsibility for the institutions which have brought about the present ill-adjustment, and so by a felt duty of reparation.¹ Likewise (3) the duty of veracity has a number of roots—the 'implicit understanding that language shall be used to convey the real opinions of the speakers' (this is the source of its 'peculiar stringency'), the duty of non-maleficence, not to do any positive injury, such as a lie will do *prima facie*, and lastly the duty of self-improvement, and the 'particularly dangerous consequences' of lying 'for my own character'.² But always each such *prima facie* obligation attaching to any particular act,—its 'tendency' to be a duty,—rises from 'some one component in the act's nature', and is apprehended from a consideration of that one component or aspect of it, alone. So much at least is self-evident about it, the moment we realise that it is (no doubt *inter alia*) the fulfilment of a promise, or the reparation of an injury, or the way to do the most good.³

(ii) On the other hand, it is its *whole* nature that makes an act to be here and now 'actually' a duty, or an 'absolute' duty,⁴ or a 'duty proper':⁵ rightly to see this we must consider *all* the constituent elements in, or aspects of, its nature.⁶ These may, as in the examples given, often combine to render it a duty, as separate grounds of the obligation to it; but equally they may conflict *inter se*; *e.g.* that it will fulfil a promise makes it tend to be a duty, but that it will cause grave pain to a number of people tends to make it wrong, and so forth: or again, that one act, A, will fulfil a promise, tends to make it obligatory, but that another and incompatible act, B, will do vastly more good tends to make B obligatory and A wrong. Our final intuition, or 'probable opinion', that A is actually right in the particular circumstances is arrived at by considering together all the relevant aspects of, or elements in, the act—like those in virtue of which it tends to be right and those in virtue of which it tends to be wrong.⁷ Where the different elements discoverable in the act agree, and point to its being right or to its being wrong, of course there is no difficulty. When, however, they point in opposite directions, and a conflict of *prima facie* duties emerges,

¹ P. 28 top.² Pp. 54-55.³ See p. 28.⁴ P. 28.⁵ P. 20.⁶ P. 28 foot and p. 33.⁷ P. 28, 33 foot.

we ask ourselves which of the two is in this case 'more of a duty',¹ or the 'more incumbent',² or 'more urgent',³ or 'more stringent'⁴ duty. Having decided which is such, we then accept this as the 'actual' or 'absolute' duty, for this occasion.

But how do we decide this? Here the theory is almost silent. To some extent we are guided by certain *prima facie* priorities of obligation, which, just like the *prima facie* duties themselves, are supposed to be agreed to by all, and presumably to be self-evident matters of knowledge. *E.g.* Gratitude (no. (3) above) or payment of debts (presumably a branch of fidelity, no. (1) above) thus tend always to take precedence of beneficence to those who are not our benefactors or our creditors—*i.e.* (presumably) to come before the whole range of that general duty to 'produce as much good as possible', of which such beneficence is a particular sub-form (no. (4b) above).⁵ Similarly, the duty of non-maleficence (no. (5) above) is said to be self-evidently more stringent than the duty to do positive good (no. (4)).⁶

But such knowledge only helps us, obviously, in special cases, *viz.* when the acts whose claims conflict happen to be of these particular kinds: and even then it takes us only a little way; for in special circumstances in which *cetera* are not *paria* a particular act may acquire features which would suffice to reverse the usual order of priority, and make it right (*e.g.*) to postpone payment of a particular debt to the making of a particular charitable bequest or gift. If, however, we ask for further guidance as to the method or principle whereby we decide the order of priority or urgency as between two *prima facie* but incompatible duties, nothing is given us but negations. We must not look for any one ground of preference to apply in every case. Just as we must not suppose that every act that is *prima facie* right is so for one and the same reason,⁷ so 'there is no principle by which we can draw the conclusion that it is on the whole right or on the whole wrong':⁸ 'for the estimation of the comparative stringency of these *prima facie* obligations no general rule can . . . be laid down'.⁹ It is a matter, as Aristotle said, of *αἰσθησις*.¹⁰

Among these very negative hints, one is particularly insisted upon, *viz.*, that the 'ideal utilitarian' principle of preferring the

¹ P. 18.² P. 19.³ P. 23 foot.⁴ P. 25.

⁵ *Vide* p. 30 middle: '*ceteris paribus* anyone would think it his duty to help his benefactors rather than his enemies, if he could not do both: just as it is generally recognised that *ceteris paribus* we should pay our debts rather than give our money in charity, when we cannot do both'.

⁶ P. 21.⁷ P. 24 top.⁸ P. 31 middle.⁹ P. 41 foot.¹⁰ P. 42 top.

act that will do most good will not serve. To do the utmost possible good is a *prima facie* duty,¹ but it is only one to be weighed in the balance with others; not the only or supreme or prerogative duty. 'Right' cannot be regarded as co-extensive with 'optimific'.² The proof taken consists of an attempt to show by instances, and particularly by appeal to the duty of fulfilling promises, that our duty is neither made nor can be unmade by consideration of how the highest good will be produced.

It is evident at once that a theory which hides the process which it professes to defend, at the most critical point, in a cloud of negations, is not easy to attack convincingly. Anyone who maintains that we decide what is our duty by comparing together *prima facie* obligations and picking out one of them as the more stringent by inspection only, and on no principle at all,³ puts himself at a double advantage.

(1) It is very difficult to subvert or to prove inappropriate any method which rejoices in working on no constant principle—as difficult as it is to confute a man who does not mind how much he contradicts himself. Such a man retains a power to strike at his opponent who does believe in some constant, universal principle of judgment, if he can only find a single case where the latter is inconsistent in his principles. On the other hand, he robs the opponent of any chance to strike at him with a like charge of inconsistency, because inconsistency of principle is, in his view, the normal and natural feature of all moral judgment. It is impossible to correct him at any point (as it is often easy to correct anyone who admits the existence of some one universal ground or character of our duties) by reference to his own judgment or to the principles he has employed elsewhere. He can always get out of the net by saying 'I know that principle B on which I act to-day not only does not support but actually collides with principle A on which I acted yesterday: but that is as it should be, because an unprincipled intuition makes me of opinion' (or, in shorter American phrase, 'I guess') 'that to-day B has the stronger claim'. Or again, if such order of priority between certain kinds of *prima facie* duty as the theory claims to be self-evident is ever reversed on any particular occasion (e.g. if ever it is believed to be right to give a present rather than

¹ P. 27 top, 30 middle.

² Pp. 34-39.

³ It may be said that despite the apparent disclaimer of any single principle, a single principle is employed, viz. 'Do the act which has the greatest (or most stringent) *prima facie* obligatoriness'. The value of this is discussed in the next number of *MIND*.

pay a debt, when both cannot be done) the defender of the theory can always here again say that his intuition leads him in this case to this conclusion, and that that for him is sufficient. By thus professing to discard any consistent principle of judgment save to abide by his intuition at the moment, he puts himself outside the reach of any appeal to maintain any consistent principle of conduct—a form of appeal which is usually accepted and predominant in moral as in all other discussions. Argument, then, on these lines is impossible. The need for consistency in one form, indeed, he readily admits, *viz.* for consistency in judgment between different people. If he judges truly at any point, then anyone else ought to judge the same. If they disagree, one must be in error, and he will admit that the error may be his: his opinions on all such matters are 'highly fallible', never more than 'probable'.¹ This candid admission saves his judgments from the fate, to which the total disclaimer of consistency in any form would expose him, of being the expressions of pure caprice and so totally insignificant. But it still affords no possible basis for argument, nor opens any way to an agreement between the parties (except, of course, by a spontaneous and equally unprincipled change of opinion on one side or the other) upon the question which of them is in error and which not.

(2) So if the opponent turns from attack to an attempt to defend his own counter-view that there is some one principle of moral judgment (*e.g.* that we ought always to do what is reasonably calculated to do the most good), again he is at a disadvantage. For the theory we are considering admits that to do the greatest possible amount of good is a *prima facie* duty: accordingly, if we show that in this case or that a promise ought to be broken because to break it will plainly work out best, our theorist can always reply, 'Agreed: a great disparity of good will turn the scale against the fulfilment of the promise,'² not, however, because to do the greatest good is an absolute and universal duty but only because it is a *prima facie* duty, and my unprincipled intuition assures me' (or, in other words, 'I guess') 'that in this case it is the more urgent duty and therefore my actual or absolute duty here and now'. So, if we show that a promise ought to be broken because its fulfilment will bring about a balance of harm, our theorist can reply, 'Agreed: but that does not prove your principle. The justification of the breach is not that the avoidance of a balance of evil over good (non-maleficence) is always a duty, but merely that it is a *prima facie* duty and in this

¹ P. 42 top.

² See p. 35, end of paragraph 2.

case I guess, or my intuition makes me think, that it is the more urgent or compulsory duty'.

We are, then, in this difficulty. It would indeed be paradoxical if such a theory is right, and if this sort of precarious shot at the right one of two or more conflicting *prima facie* duties, without any possibility of discussion or correction of our opinions, brings us as near to the truth of our duties as we can ever hope to attain.¹ On the other hand, the possibility of this cannot be ruled out *a priori*; nor does the chance of disproving it by examples seem hopeful.

If, however, the theory maintained against us is difficult to assault in itself, we can at least examine the arguments directed against our own. Do the examples taken show successfully that educated people do not on reflection always judge such doubtful issues of duty by asking what is the 'best' thing to do, or 'what good will come' of doing this or of doing that? Or can we not find examples to show clearly that this is how they judge? Telling examples are hard to find just because, as we have noted, our opponent can always claim to interpret our 'higher good', flowing from the nature of the preferred act and its consequences, as a 'more incumbent duty', flowing from the nature of the preferred act itself. But we may take heart. What is sauce for the goose is sauce for the gander: possibly we may always be able to interpret our opponent's 'more incumbent obligation' to the act itself as a 'higher good' to come of it. If so, we shall at least be quits with him; and if we can in addition find examples where the obligation comes and goes with the chance of doing any good by the act, while the nature of the act remains unchanged, we may claim to have scored a definite point against him. We shall do well to try to get past his subtle guard by looking out for examples where the breach of the *prima facie* duty will not produce a definite balance of either good or evil (such as he can readily bring under his alternative *prima facie* duty to do good or to avoid evil), but simply fails to do any good—where (*e.g.*) a promised act would be (as it turns out when the promise comes to be fulfilled) purely futile and wasteful. Or, if good or evil are to result, it had better be, for our purpose, some good or evil (*e.g.* pleasure and pain to ourselves) which according to the theory we are discussing many people recognise no *prima facie* duty to realise or to avoid; we can then ask how the theory in question succeeds, in comparison with our own, in interpreting *their* moral judgment.

¹ As is asserted, p. 42 top.

The important points to establish, if possible, are :—

(1) that even the *prima facie* obligation to keep a promise (or to do anything else) is derived from a consideration of the good or evil at stake in the doing or not doing of it: and (2) that in deciding whether to keep the promise (or to do whatever it may be) is an 'absolute', 'actual' duty or not, the consideration on which side the greater good or evil lies is likewise vital, and is the determining consideration.

It is not always quite clear which of these two problems the examples taken by the Provost of Oriel¹ are meant to illustrate—whether the way in which our *prima facie* duties, or generally agreed rules of conduct, arise, or the way in which we decide our *actual* duty, when two or more such *prima facie* duties conflict: but they seem more relevant to the latter issue; and discussion of them will be delayed for the present. Meanwhile, let us examine the first problem.

(a) *That our prima facie duties* (the general rules which tell us that X is a kind of act we ought always to do or to avoid) *are determined by consideration of the good or evil at stake in the doing or not doing of them.*

Let us take (e.g.) the fulfilment of a promise. As a rule, the fulfilment of a promise confers a definite benefit on the promisee, and the breach of it will cause him definite harm; annoyance and disappointment at the least, and probably definite losses of good of other kinds as well, material, or artistic, or intellectual, the kind and amount of this loss depending, of course, on the nature of the particular promise. Further, the maker of a promise (whatever its particular nature) himself has as a rule a direct personal interest in its fulfilment, unless for some obviously sufficient reason. Breach of it is likely to hang round his neck a reputation for untrustworthiness, which will very seriously hamper his power to co-operate with others, and thereby his power to do good, for an indefinite time to come: and the self-paralysis thus sustained and tending to endure may easily entail a more serious loss of good than the momentary disappointment or loss (which may be of some trivial, passing character) caused to the promisee. More than this, the fulfilment of a promise confers a very substantial, if indirect, benefit, and its breach a very substantial loss, on society as a whole. The summary of this aspect of the case cannot be put better than in the Provost's own words: By breaking a promise you 'strike a

¹ Pp. 34 foll.

blow at one of the devices that have been found most useful in the relations between man and man—the device on which, for example, the whole system of commercial credit rests—and you tend to bring about a state of things wherein each man, being entirely unable to rely on the keeping of promises by others, will have to do everything for himself, to the enormous impoverishment of human well-being.¹

The Provost admits this last to be a 'fairly serious' consideration,² but tries to water it down as follows: 'it may be suspected, too, that the effect of a single keeping or breaking of a promise in strengthening or weakening the fabric of mutual confidence is greatly exaggerated by the theory we are examining'. But is it easy to exaggerate it? Is it not anyhow immense? It is easy to pour scorn on the importance of a single breach of promise looked at abstractly, as a single event by itself, and stopping where it is. But that is just where the non-utilitarian habit of looking at acts abstractly, 'in themselves', is so dangerous. To 'stay as it is' is just what a breach of promise tends violently not to do: if permitted and approved, such breaches (often extremely convenient to the breaker) have a tendency to spread. The situation immediately suggested by the Provost's words 'a single . . . breaking of a promise' is not the situation we have to think of. His words suggest a single breach of promise occurring as an exception to the general practice, and in face of a general opinion that such breaches are wrong. What we have to ask is what would happen if this general opinion were scrapped, and if a breach of promise could appear in public with no halter round its neck, admired as a shrewd device, or at least approved as quite unobjectionable and lawful.³ Imitators would pour in as thickly as applicants for the dole. 'If A may break his word for his own convenience, why not I for mine?' In six months or less credit would be as dead as national solvency with a universal dole. The argument that the single breach is so tiny a damage to the whole

¹ P. 37 foot.

² P. 37.

³ That this is the question is obvious, because it is the *raison d'être* of a *prima facie* obligation, or general rule, to keep promises that we are now discussing. In discussing why a general rule should exist, or would need to be set up if it did not exist, we must obviously consider what things would be like without it, and must not presuppose it as existing already. The question whether ever, and (if so) when, a breach of promise is right, as an exceptional act, in defiance of a general rule and understanding, already existing and in force, that they ought to be kept, is a question of the absolute duty of a particular moment—a question for *αἰσθησις* and not for *νοῦς*, such as we shall come to later.

huge fabric of credit as not to matter much, reminds one of the plea of the child who has punctured the tyre with a pin—'Such a tiny hole! Look at all the sound tyre you still have left'. Or (if this analogy be objected to, on the ground that punctures do not tend to reproduce themselves) we may compare the plea of the incendiary who lights the fuse—'I only fired three grains of gunpowder, and *they* did not blow up anything'.

The damage done to credit by a single breach of promise is analogous to the damage done to the general security of life by a single murder. Recent history in Ireland or in Chicago sufficiently illustrates the situation which soon arises if murder be unsuppressed, and that even when the law and (we may suppose) the sentiments of most people still condemn it. What would it soon become if uncondemned even in theory? Such examples afford ample reason why, apart from any other reasons, murder should be generally condemned and suppressed as wrong. Sometimes this general risk to security is the main, if not the only, reason why murder is not allowed; why (*e.g.*) it is not accounted right, or a meritorious act of kindness, to put a hopelessly sick person out of his misery as one would a sick animal. The continuance of his life (let us suppose) is now a torture to him: his friends, too, who are nursing him, are being worn by it into their graves. Sometimes, no doubt, it is true of painful diseases that *καὶ ἐν τούτοις διαλάμπει τὸ καλόν*:¹ there is always the chance that suffering may afford the occasion of heroic patience. Let us suppose, then, that in this case neither sick man nor nurses show any heroic patience up to date, nor is there the slightest probability yet in sight that they ever will. Still, in spite of the apparent absence of benefit from the patient's life to any of those immediately concerned, most people would hold it clearly to be wrong for the nurse to administer an overdose of sleeping-draught; and the reason is surely the extreme risk of once allowing the issue 'to live or not to live' to be entrusted to the judgment of nurse or doctor. It is not merely that a practice of painless extinction, begun from humanitarian motives, might easily spread into a like practice carried on from other motives—that the nurse who finished off A out of kindness might presently finish off B from spite, or to quicken the receipt of B's legacy to her; though such risks, too, are not slight. A sufficient ground would be that judgments are fallible, and never more so than when under the influence of an appeal to pity. The evil involved in the slaughter, even with the kindest motives, of those who

¹ Ar., *Eth. N.*, I. 10, 1100b, 30.

on their merits had better have been allowed to live, would probably far outweigh the good involved in the slaughter of those whom (considered abstractly) it would have been better to put to death. Thus if we feel a duty to respect and preserve life, even when life seems to have least to offer, we need not suppose ourselves to know this indubitably to be a duty irrespective of what may come of it: there is at least equally ample ground for the conviction in a consideration of the disasters that would be likely or certain to ensue if the rule were relaxed.

The same remark applies, too, to the obligation to keep a promise. In this case indeed the argument from the risk that any leave to break promises, once granted, would be abused gains redoubled force. The motive prompting to an abuse in the case of painless extinction would usually be pity: the motive prompting to breach of a promise would almost always be a supposed or narrowly conceived self-interest, and this is a far more potent source of self-sophistication and deception than even the other: 'no man is a good judge in his own case'. It is hardly too much to say that if pity sometimes clouds the understanding, a narrowly and stupidly conceived self-interest almost invariably blinds it. Here is an additional reason why a consideration of the likelihood or certainty that the gravest ill-consequences will follow, if leave be given to break promises at will, gives ample ground for the existing sense of a *prima facie* duty, or general rule that we ought, not to break them.

The magnitude of the evil liable to occur indirectly to society at large, if the ban on killing (even compassionate killing), breaches of promises, etc., should ever be removed, forms, in comparison with the direct harm to the individuals concerned, a very large item indeed in the utilitarian account of the reason why the ban should still be kept on. Here I think the Provost's language is liable to mislead unless this be carefully borne in mind. When against the one thousand units of good done to A by the fulfilment of a promise, the reader sees the harm done generally by a breach of promise set down as '— *y*',¹ he needs to remember that *in the absence of any general rule that promises be kept* (and we must insist again that this is the situation we have to consider when exploring the ground why promises should be generally binding at all) '*y*' will always be a sum colossally larger than the thousand units of good which are to come directly to A. If this be remembered, it will be apparent that the balance of good as shown even by an utilitarian calculation will always

¹ P. 38.

be overwhelmingly in favour of the existence of a *prima facie* duty, or general rule, that promises be kept. Fidelity as a general rule is established securely enough.

The Provost tries to minimise the force of this argument, which appeals to the general effects of infidelity upon society, by supposing the case of two men dying together alone, and asking 'Do we think that the duty of one to fulfil before he dies a promise which he has made to the other would be extinguished by the fact that neither act would have any effect on the general confidence? Anyone who holds this may be suspected of not having reflected on what a promise is.' My answer to this is 'Extinguished? Of course not, if *other* reasons exist why the promise should be kept; and presumably there would usually be such reasons, *e.g.* the good intended to be done to the other man by the fulfilment, and awaited by him.' The lack of support to general public confidence from such a lonely and unwitnessed fulfilment of a promise would not extinguish the obligation to fulfil it unless support to the general confidence were the *only* reason for fulfilling it.

On the other hand, few will (I think) deny that the isolation of the two men *diminishes* in that particular instance the force of the obligation to keep the promise, exactly as there is less reason to punish a wrong that is known only to the injurer and the injured. In such a case, if the injurer is at all amenable to reason, the right course is probably to reason with him and bring him, if possible, to repentance in private.¹ An injury, on the other hand, that is known to the public may have to be punished, even though the doer of it be already penitent, because of its infectious character: if once the train has been lighted, it must be stamped out. Most of all is this necessary if the injury has been done openly and ostentatiously, as a deliberate insult or outrage, with the express purpose of inciting others to do the like. No doubt exposure and punishment may be necessary also, even for an injury done in private; *e.g.* if the offender will not listen to reason.² But privacy, whereby the force of example is eliminated, certainly makes it less obligatory to punish; and I cannot doubt that it would likewise render it less important to fulfil a promise, because it cuts off what in any circumstances would be a reason for fulfilment, and in the circumstances we are considering, where a duty to fulfil promises was not as yet at all generally recognised, an overwhelmingly strong reason.

The example suggests a further reflection tending to show

¹ Cf. St. Matt. xviii. 15.

² Cf. St. Matt. xviii. 16, 17.

that even the *prima facie* obligation to keep a promise depends not on the mere past fact that the promise has been made, but on the future prospect of some good coming of the fulfilment—in other words, that it is arrived at not in the way indicated by the Provost,¹ but in the opposite way, as maintained by the utilitarian. If, by supposing the two men to be quite alone, we eliminate all arguments as to the effect upon anyone else of what they do, there still would usually (we may suppose) remain enough reason in the good thereby to be done to the promisee to justify fulfilment of a promise on the utilitarian principle. If so, so far the two theories are quits. But now let us suppose that there is no longer any prospect of any good coming of it. Suppose that the two sick men have been in the habit of making music together at 5 p.m., and that A yesterday promised B that before 5 p.m. to-day he would put a new E-string on B's violin. Unhappily at 4 p.m., before the promise has been fulfilled, B's illness has taken a sudden turn for the worse, and by 4.45 it is evident that he is sinking and will never touch his violin again. Is there now the slightest, even *prima facie*, obligation on A to fulfil his promise? If the obligation to do a promised act springs automatically out of the fact that the promise has been made, Yes: but, except to maintain that thesis, I am certain that anyone considering the case would say, No. If so, however, it is here the ideal utilitarian theory, rather than that which the Provost maintains against it, that correctly interprets the principle at work in our moral judgment.

Once more, suppose not B but A to be suddenly taken worse. The fulfilment of the promise will now be of *some* benefit to B, though a diminished benefit, seeing that he must henceforward play in solitude, and violin parts alone are not always particularly interesting: but, further, let us suppose that A is in pain and can scarcely bear to move. I cannot believe that A, no matter who he might be, would feel any obligation to fulfil his promise; whereas, on the Provost's theory, he would on reflection necessarily feel so bound, unless he happened to think of the maintenance of his own comfort or avoidance of increased pain as a *prima facie* duty, which in this case he was more bound to respect than the advantage to B—and admittedly we do not habitually think of our own feelings so.² If so, however, here too the utilitarian theory, which holds that our moral duty is determined by a weighing together of the good or evil results of action, comes nearer to the mark than a theory that believes

¹ P. 17 foot.² P. 26 top.

it to be determined by a weighing together, heaven knows how, of competing *prima facie* duties.

We may perhaps put the points contained in our two last comments on this example into a rather more general form. The intuitional theory we are examining provokes a statement of two general respects in which it fails, whereas ideal utilitarianism succeeds, in being a true account of the working of our moral judgment.

(1) If it be true that the obligation to do any particular kind of act springs simply from the nature of that particular kind of act, and is apprehended solely by a survey of that nature (*e.g.* that the obligation to fulfil a promise springs solely from the fact that a promise has been given, and that 'a promise is a promise'), then it would seem to follow that there could not be any difference in the degree or cogency of our *prima facie* obligation when the same kind of act falls to be done in different contexts. Between different kinds of act in the same situation there might well be: *e.g.* it might well be that (as the Provost asserts) the *prima facie* obligation to pay a debt is always stronger than the *prima facie* obligation to give in charity, when both are not possible. But between acts of the same kind on different occasions there could not be, just because the obligation is held by the theory to depend purely on the general form of the act, and this *ex hypothesi* is in both cases the same. Yet, that there is such a difference in the degree of obligation on different occasions to do the same kind of act seems to be admitted *obiter* by the Provost when he speaks of a case when 'a promise' (*i.e.*, as is clear from the context, the *prima facie* duty to keep the promise) is 'comparatively trivial': and the same sentence implies, too, that the obligation to do a benevolent act is more stringent 'when the good to be produced by the benevolent act is very great'.¹

In any case, such a difference is generally recognised. An acceptance of (*i.e.* a promise to attend) an afternoon 'At Home' is generally treated as no very binding obligation: it is normally honoured by half to two-thirds only of those who have given it. On the other hand, an acceptance of (or promise to attend) a dinner-party is recognised as much more binding: to fail to honour this without notice would be an unpardonable social offence. To propose to get out of it at all, except for gravest reasons (*e.g.* sickness, royal command, etc.) would be generally condemned as wrong; and the degree of the offence would be held to increase as the time grew shorter. There are, then,

¹ P. 19 top.

generally recognised to be different degrees of cogency in our *prima facie* obligation to keep different promises, or even to keep one and the same promise, as that obligation would stand and would have to be brought into the scales with other *prima facie* obligations, should such arise ; and the degree of obligation is liable to vary, in the latter case, with the way in which the situation has developed since the promise was given, and with the length of time which the promise has still to run. We have only to think, for example, how variously the duty to fulfil our promise would be affected by the arrival of a message imploring us to come and visit a sick relative in the South of France if the promise should happen to be one to attend (1) a tea-party, or (2) a dinner-party, or (3) to fulfil some public engagement ; or again, suppose the message arrived (1) a week or (2) three days before the dinner-party, or (3) on the actual morning of it.

It is easy to think of other examples. The *prima facie* obligation to keep a promise to attend an 'At Home' may easily be found to vary with other circumstances. Suppose (*e.g.*) it turns out to be a big affair at which our presence or absence will hardly be noticed, the obligation will then be 'relatively trivial' : we then hardly need any obvious *prima facie* duty elsewhere to excuse us : a headache, or even mere disinclination, when the time comes, would usually be accounted enough.

Suppose, on the other hand, it turns out that the 'At Home' has to face the competition of some popular attraction, making a small and disappointing attendance likely, or that someone has been specially asked to meet us there, or that some other special arrangement has been made for our reception there ; then the obligation to fulfil our promise will be relatively stringent. (To avoid the suggestion that any of these circumstances enters into or qualifies the nature of the act promised, let us suppose that the maker of the promise knew nothing about them when he made it). Again, the obligation to fulfil a promise to come and play or sing for someone is of a very different stringency in different cases. Is it for a preliminary practice, for a final rehearsal, or for a performance ? Will it be difficult or easy to find a substitute ? Am I to play a leading part (for example, pianoforte in a sonata or trio), or to be merely a 'one note man' in an orchestra, or one singer among many in a chorus ?

I do not see how the effect which such differences have upon the stringency of the promise can possibly be accounted for by a theory which derives the obligation simply from the past fact that the promise has been given : for that fact (the general form of a promise) is constant in all cases. It is not affected by

the particular nature (or content) of this promise or that, or by the length or shortness of the time that the promise has still to run, or by the particular way in which unknown factors have settled themselves since the promise was made. On the other hand, the 'ideal utilitarian' account here seems exactly to fit the case. On this view the universal method of moral judgment is to ask what will happen in either case, *i.e.* what will the *consequences* be of fulfilment or non-fulfilment, and (so far as these can reasonably be foreseen) what kinds or amounts of good or evil does either course involve. This account seems to tally exactly with the way in which the ordinary man puts the question to himself. The question 'What ought I to do?' as it takes shape in his mind, and is expressed in simple common speech, is convertible with the question 'What had I *better* do?' or 'What is the *best* thing to do?': and in answering this he considers the immediate alternative acts proposed in the light not only of the existing situation and of the previous acts, pledges, etc., whereby he has got into it, but also of all the consequences which may reasonably be expected to come of the one immediate act or of the other. The question what is the best (immediate) thing to do, really presents itself to him as, which of the immediately possible acts (things-to-do), taken along with all their reasonably foreseeable consequences, forms on the whole the best train of events. These consequences, no doubt, include a certain number that will flow from his own previous acts (*e.g.* if he has made a promise, incurred a debt, married a wife, begotten children, etc.), and such consequences are apt to be a substantial proportion of the whole to be considered; but they never need be all, and perhaps never are. There are probably always to be taken into account some foreseeable results of some weight (and there may be any number, of any weight) that spring from circumstances by no means of the agent's own making, and from circumstances which, when he committed himself, he did not foresee.

To return to the special case of a promise: On such a view it is evidently normal and natural that in estimating the *prima facie* force of an obligation to fulfil a promise we should regard the particular nature not merely of the act promised, considered abstractly, as we foresaw it when we promised it, but of the whole situation as it stands when the promise comes to be fulfilled, and as it is likely to be affected for good or evil by fulfilment or default. It is then easy to see how the good likely to come of the fulfilment, or the damage or inconvenience to be caused by a default, is very much greater in the case

of some promised acts than in that of others. Consequently, it is only natural that alongside of the general rule that promises should be kept (for which, as we have seen, there is ample justification on this principle) there should come to be formulated also a number of supplementary general rules laying down the different degrees of cogency which the general obligation may assume according to the particular nature of the act promised, and according to the consequences that fulfilments or defaults in such cases are likely to have. Thus promises to attend 'At Homes', early rehearsals, even concerts where there are plenty of substitutes to hand, are relatively trivial: default here does little harm. On the other hand, promises to attend dinner-parties or dress-rehearsals, or (still more) performances where no substitute is available, promises to act as chief speaker at a public function, etc., are relatively serious and weighty, because grave harm and inconvenience are generally caused if they are not kept. This is in fact certainly what happens. Such modified forms of the original general rule take their place among the general rules, or *prima facie* duties, that guide our practice, and are regarded with as much respect as the general rule itself. They are in fact the particular forms which that general rule takes in our minds whenever the act promised is of the particular kind to which they relate. How this differentiation in the strength of the obligation is to be explained on any theory which holds that the obligation to do a promised act arises simply from the promise to do it having been given, regardless alike of particular circumstances as they may since have developed and of probable consequences, I fail to see.

Not only are such rules approved, and observed without compunction in action, whether they are commonly put into so many words or not, but the common language of the moral judgment, if put on its defence in regard to them, seems clearly to show that they are arrived at, and most naturally defended, by ideal utilitarian considerations of the above kind.

'Why don't you feel any strong obligation to attend "At Homes" or early rehearsals when you have promised to do so?' A natural answer is 'Because attendance at "At Homes" and early rehearsals does not *matter* very much' or 'is not very *important*'. The words used (to 'matter', to 'be important') clearly are not mere equivalents for to 'be obligatory', over again; or they could not even pretend to answer the question. But if they mean something else than that, what else can they mean except that attendance is not productive of any great good or non-attendance of any great evil? Press a little further, and

it is practically certain that it is in terms of some definite kind of good to be lost or won that the answer will be given: the material consideration will be the convenience or feelings of the hostess or of the friend invited to meet us, the gain or loss to the beauty of the music, to the cause or interest in which the public meeting is held, etc. And how else it would be possible to discriminate, I cannot imagine. Here, then, seems to be one feature of our *prima facie* duties, as generally recognised, which is easily explained and justified on the view that what gives them their force is their general value as means to good, but hardly, if at all, on the theory by which the Provost wishes to supplant that view.

(2) Another consideration which seems to point the same way, and to be likewise fatal to the view that the *prima facie* duty (or general moral rule) to do this or that particular kind of act, is known intuitionally from a consideration simply of the kind of act, irrespective of consequences, is this: that if no good will come of the act in question—in other words, if it be perfectly fatuous and futile—then no matter what its antecedents may be, or what its own particular character, there is not even *prima facie* any obligation to do it at all. Most of the acts to which there is said to be a *prima facie* obligation obviously cannot be used in illustration of this point at all: e.g. acts of 'reparation' for a previous wrong; for reparation is essentially the doing of some good to the wronged persons: nor yet acts of 'gratitude'; for these again are essentially the doing of some good in return for good received: nor yet any of those which come under any variety of the *prima facie* duty to 'produce as much good as possible',¹ i.e. any act of 'beneficence', of 'self-improvement' or of 'justice'.² Since all these kinds of duty consist necessarily in the doing of certain kinds of good, no act which did no good could possibly be an example of any of them. All we can say, therefore, in regard to any of them, is that any act *intended* to perform any of these kinds of duty, would *ipso facto* fail to be even *prima facie* a right act if obviously no good could be expected to come of it. And this will hardly be denied.

There remains, however, the case of a promise. An act may quite conceivably be such as is clearly going to do no one any good, and yet be the fulfilment of a promise. Is there then any obligation, even *prima facie*, to do it, if this be so? E.g., I have promised to play at a concert. As the music is in a heavy folio volume and I must bicycle to the concert, I have promised

¹ P. 27.

² As defined and classified in *op. cit.*, pp. 26-27.

to send it on ahead. I have also promised to send on another copy for the use of my partner in the performance. Here are three several promises. The day before the concert I fall ill, and there is no prospect of my being able to play ; my item on the programme must therefore (let us suppose) be scrapped. Promise No. 1 must now be broken, because its fulfilment is impossible : but how of promises 2 and 3 ? I have made them, and the nature of the acts promised is perfectly clear : but must I keep them ? Or again, suppose that I can play, and that promises 1 and 2 stand firm ; but my partner falls ill, and his substitute has his own music : does promise No. 3 then bind me ? The Provost, to be consistent with his theory would (it seems to me) have to say in each case ' Yes : for a promise is a promise '. But I feel confident that anyone else, and I think that he too, as a practical man, not engaged in ' maintaining his thesis ', would say at once ' No. Of course not '. Why then ? It would be fair and relevant to say ' Because you will be giving an infernal lot of trouble and expense for nothing to somebody who will have to send your music back '. But that reason would not clear the issue here, for the Provost could then at once bring it under his *prima facie* duty of ' non-maleficence ', and urge that the *prima facie* duty to keep the promise, *though still in force*, was in this case outweighed by this other *prima facie* duty not to be a pointless nuisance to anyone. Let us then eliminate this particular answer by supposing that I have already made arrangements for the return of the books. Why then need I not send them, as promised ? Because to do so will do no earthly good : and therewith, on the utilitarian theory, the *prima facie* obligation to keep the promise automatically collapses. On the Provost's theory (as far as I can see) it would not collapse of itself, nor in his list of *prima facie* duties is there any that would obviously counteract it.

Or again, I have promised (1) to call at X's house at 2 p.m. to-morrow, and (2) to go for a walk with him : but I have just received a note from him saying he regrets he cannot come for the walk. Promise No. 2, then, is now void, for it cannot be fulfilled : but how of promise No. 1 ? Am I bound to call at his house, where I shall certainly be told (what I know already) that he cannot come for the walk ? Here again, everyone else, I am certain, will say No : the Provost, if he is to maintain his theory, that a promise once given is *ipso facto* binding, must (as far as I can see) say Yes. It may, perhaps, be objected to this last example that promise No. 1 is plainly conditional, and therefore would clearly collapse if the condition collapses ; or

again that the two promises relate to parts of a single action, of which the first part clearly need not be performed if there is no chance of performing the second. I am not sure how far a theory which regards a promise to do x as binding in itself, and irrespectively of any good that may come of it, is entitled to enter any such objection; but to avoid a digression about that, I will take a case where the promise (though doubtless extracted for a purpose, as most promises are), was only a single promise and categorical. X, the vicar (let us suppose) of the village where I live, has sent me a note, 'Will you kindly send your piano up to the parish hall next Thursday afternoon?' I assent categorically. I happen to hear afterwards that he is arranging for an entertainment there that day at 7 p.m. At 1 p.m. on Thursday the squire dies, and the entertainment is cancelled. The vicar is away and inaccessible till close on 7 p.m., and no one else (I presume) can be competent to release me from my promise to him. Am I then still bound to send up my piano in the course of the afternoon, to adorn what I know will be an empty room? Again, must not the Provost say Yes? and again, who else would?

(3) I do not see, either, how on the Provost's theory other cases can be explained in which a promise may cease to be obligatory, when by common agreement, I think, it would. I will not take the familiar cases (*e.g.* Neptune's promise to Theseus) where fulfilment will harm the promisee, or where (as in the case of the promise to assist in a burglary) it will harm an outside party, or society at large: because here the Provost can always call in the *prima facie* duty of non-maleficence, and plead that here it outweighs the duty to keep the promise, though the latter is still *prima facie* valid. I should, I think, be justified in questioning whether on its merits the latter could possibly be so; that is, whether it could ever be right to fulfil a promise to do wrong. 'Honour among thieves', I should be prepared to maintain, is a nonsensical phrase, if it means that any thief has any duty to another thief to assist or protect him in wickedness: none has any duty to any other save to turn honest himself and by all possible means to persuade the other to do likewise. But here again I should be countered by the plea that *prima facie* the promise was still binding, but outweighed by the *prima facie* duties of 'beneficence' and 'self-improvement' (promotion of virtue in oneself and in others). A better test would be a promise made under a misapprehension. Suppose it to have been extracted by fraudulent misrepresentation; *e.g.* suppose a rich miser to have visited me *in forma pauperis*, and to have extracted

from me a promise to pay him £100 in six months. If I discover the fraud in time, will anyone hold that my promise binds me? Or again, let us eliminate fraud, and suppose that a genuinely poor man extracts a like promise, but that before the six months are elapsed he comes unexpectedly into a fortune: am I bound by my promise to pay? No one would hold me bound, even *prima facie*, in the first case; and very few, if any, in the second: and this for the very good reason (on the utilitarian theory) that the gift will not now secure the addition to human good, by the relief of distress, which it was designed to have as its consequence when the promise was made. What answer must be given on the Provost's theory, according to which no consideration of consequence has the slightest relevance? Let us (to simplify the issue) suppose that the money will be similarly employed in either case: that if I pay he, and if I don't, I will invest it in War-loan. This will eliminate the possibility of the reply, that I shall spend it to better advantage than he, and that therefore, although the force of the promise remains, it is over-ridden in this case by the yet more stringent *prima facie* duty of doing as much good as possible. If we forestall evasions of that kind, I think that the theory we are examining will require the answer to be that the promise has been made, that the act promised to be done is clear and still possible, and that therefore the *prima facie* obligation to do it stands; while inasmuch as there is no other *prima facie* duty obviously in competition with it, it is in this case an absolute duty and must be done. Yet, if so, must not the theory here again fail, where the ideal-utilitarian theory succeeds, in indicating and explaining the path which our moral judgment naturally takes?

(4) The principal charge brought against the ideal utilitarian principle, which sets up the production of the highest good as the supreme and universal guiding principle of duty, is that it 'ignores . . . the highly personal character of duty. If the only duty is to produce the maximum of good, the question who is to have the good (myself, a benefactor, a promisee or a mere fellow man) . . . should make no difference to my having a duty to produce that good. But we are all in fact sure that it makes a vast difference.'¹ Again, on that theory there is (it is said) no reason to choose between doing *x* units of good to a promisee, by keeping our promise made to him, and the same number of units of good to anyone else to whom we had made no promise: whereas (it is rightly said) we are unhesitatingly

¹ P. 22.

convinced that the former is our duty, rather than the latter.¹ But can this conviction not be amply accounted for on the utilitarian theory, that what we instinctively and rightly approve as *prima facie* right, is the act that is generally productive of most good? In the case of a promise we have already seen² that there is abundant reason why, for the very existence of public credit, a promisee should, generally speaking, and *ceteris paribus* (and it is only in that abstract way that we are looking at the problem so long as we are concerned only with these *prima facie* duties, or general rules of conduct) have very strong claims, and usually a first claim, on our attention. No organisation of the members of society for any rational purpose would be possible unless people could establish claims by making promises on each other's future services, and could rely on it that normally, and except for very good reasons, such promises would be kept.

The same is true of the *prima facie* duty of gratitude, *i.e.* the duty to repay services (irrespective of motive) to those who have done them to us.³ The case is not quite so simple as it may look: we may ask either why people do *in fact* feel moved to return such services, or what is the genuine and sufficient reason for thinking this to be a *duty*, *i.e.* why really such services ought to be returned. The actual motives which prompt people to return them are perhaps as follows:—

(i) Gratitude—prompting a desire, rather than any sense of obligation, to return the compliment.

(ii) Acquisitiveness, or a 'lively hope of favours to come'—prompting again the desire, rather than the sense of obligation, to keep the door open for the receipt of future services.

(iii) Pride—prompting a desire not to be outdone in munificence.

(iv) The realisation that a society whose members serve one another is better than one in which such services are not returned, and that it is therefore a duty to promote it, even apart from any special feeling like gratitude, or hope of further services, such as might incline one to do so.

Now in this last we have an ample ground for the sense of a duty (as opposed to a mere desire) to return a service done. Let us consider the several points involved. It is at once clearly better that B, having been benefited by A, should do a benefit in his turn; or only half the good is done that might be. That B should serve in *turn* is thus at once clearly intelligible on the utilitarian theory: but why in *return*? Why serve A, who has

¹ See p. 18.

² P. 153 foot (above) and foll.

³ P. 23 top.

served him, rather than serve C or D ? The particular gravamen of the charge against ideal utilitarianism is that in saying merely 'Do as much good as possible' it is dumb here. But is it ? Or is it not obvious that one relation of 'friendship' between A and B, such as that which *mutual* service either expresses or tends to produce, is of far greater value than the relations expressed by two merely unilateral services, of A to B and of B to C or D ? If so, however, there is clearly abundant *prima facie* reason why, even on the utilitarian theory, it is a duty to work for and maintain the former kind of relation. To return a service, especially where it requires a sacrifice, is to show most unmistakably that the service has been appreciated, and to keep alive A's good-will. Not to return it is to choke the life of friendship in its infancy, by discouraging the effective good-will of A ; or, if A's good-will still continues to live and to express itself, the relation is inevitably, if unintentionally, diverted downhill from friendship into patronage.

We must note that the duty so justified is a duty of just the same kind, and valid to just the same extent, as the duty described by the Provost. It is not (*e.g.*) dependent on 'motive', in the sense of the particular state of B's feelings to A at the moment. If B already feels a friendly disposition to A, this will ease his service in return, and he will then do it that *inter alia* he may maintain this disposition : but if not, the duty still binds him : he will still do the service in order that *inter alia* he may develop such a disposition. Again, the duty to return a service in this way, as here justified, is not, any more than the Provost's duty of gratitude, always an absolute duty. The utilitarian would say that considerations of a greater good to be done in some other way might in any case over-ride it, exactly as the Provost would say that either this or any other *prima facie* duty may override it. But as a *prima facie* duty, as an act that 'tends' to be a duty, or that *ceteris paribus* is a duty, the return of a service to a benefactor rather than the doing of a like benefit to a third party, does not require the Provost's theory (as he thinks it does) to explain and justify it. For the sense of *prima facie* obligation, which he thinks we perceive directly attaching to the nature of the act itself, irrespective of any consideration of any good to come from the act, or of any comparison of the amounts of good likely to come from the two kinds of act in question, we can find an ample basis in just these considerations. At least, then, the two theories are quits.

But, more, is not the utilitarian theory the more plausible of the two ? According to the Provost's theory, the obligation to return a service is entirely separate from the obligation to

produce the most good, or any good at all: it is apprehended by a direct intuition that regards the act only, and does not consider any good to come from the doing of it, or evil to come from the omission to do it. No doubt it may be said that if, or since, it is a duty, it is good that it should be done, and evil that it should be omitted. But evidently, to be aware of *this* good, we must already have made up our minds that it is a duty. Our sense of this good cannot be any part of the reason why we regard the act as a duty. Accordingly, it is not only an act whose good effects (if any) we are supposed to dismiss from our minds, when we are considering whether it be a duty or not: it is also an act in which, when seen, as the theory supposes us to see it, *by and in itself*, no good appears at all—an act which might just as well not be done, as be done. How on this information anyone could ever become convinced that he had even a *prima facie* duty to do it, I find it hard to understand: I am pretty sure that I could not.

Again, there is no difficulty in explaining, on utilitarian principles, the 'personal character' of a duty of punishment (for those who believe that there is such a duty).¹ The sufficient reason why *prima facie* it is a duty to punish only the guilty, is that they are the people who most need to be brought to reconsider their ways, and there is nothing so provocative of reflection as the inability to sit down in comfort. To inflict pain on an innocent whipping-boy is not likely to be nearly so effective; and further, being by its nature a brutal and arbitrary proceeding, is likely (except by a miracle) to destroy what so far is a good character. It is therefore highly in the interests of the common good that in general punishment should fall on the guilty rather than on the innocent: and if, as is generally admitted, there are sometimes special circumstances (*e.g.* outrages in war whose authors cannot be found) which make it right to take reprisals on a whole district, including innocent and guilty alike, the justification here is similar, namely that this is the way to make the *best* of a bad situation. The 'personal character' of many forms of the duty of beneficence are explicable with equal clearness on no other principle than our general duty to promote the highest good. Why is it right that people should be made responsible for their own, rather than for their neighbours' children? Clearly because responsibility best lies upon those

¹ The Provost recognises this duty, as a derivative of our general 'duty of producing as much good as we can' (p. 58), but denies (falsely, as I think) that utilitarianism can admit any reason for punishing a wrongdoer rather than an innocent person (p. 60).

who are best fitted to discharge it, and it is, generally speaking, towards their own children that people are most richly gifted by nature with the equipment (insight, interest, sympathy, etc.) needed to enable them to support and care for the young. I am driven thus to think that the very examples which are adduced to show the ideal utilitarian's failure to account for the characteristic features of the *prima facie* judgments of obligation, in fact show the opposite. Our sense of the *prima facie* obligation to act in such and such a way goes hand in hand with a conviction that so to act works out (generally speaking) for the best; and if the existence of any such general obligation is challenged, it is on the truth of this conviction that we instinctively and naturally join issue. It is with this conviction that our sense of the *prima facie* rightness or wrongness of the act in question stands or falls.

(5) One more possible objection to our analysis may be noted here. It may be said that there is definitely *more* in the sense of a *prima facie* obligation to act in a certain way (e.g. to tell the truth, or to fulfil a promise) than can be accounted for by supposing merely that so to act will produce the best possible result; and that this 'more' shows itself whenever, in order to produce the best result on the whole, we find ourselves obliged (as even the Provost allows that we sometimes are, and the ideal utilitarian would hold us to be every time) to violate any such *prima facie* obligation. The sense of compunction and reluctance which we then feel at the violation cannot (it may be said) be accounted for if the obligation be nothing but a prescription of the normal means to the highest good, and if all we are now doing is to adopt, in an exceptional case, exceptional and better means to that same end. The surgeon (e.g.) who operates successfully in one and the same way in 999 cases feels not the slightest compunction in operating differently in the 1000th case, where an abnormal anatomy or complication of conditions requires abnormal treatment; whereas however necessary and admittedly right it may be in a particular case, for the sake of some overwhelming good, to break a promise or tell a lie, it goes violently against the grain to do so. Our *prima facie* obligation to speak the truth or keep our promise is therefore (it may be argued) not adequately analysed or accounted for by representing such acts merely as courses that normally produce the most good.

This objection, however, turns (I believe) like the rest, when rightly considered, into a ground of support for the ideal utilitarian theory. Admittedly, on that theory, the telling of lies and breaches of promise are acts pregnant with evil. The neces-

sity for them betokens a situation already in some respects evil ; they themselves import into it other definite evils, and incalculable risks of further evils yet. Enough has already been said upon this. These evils and risks of evil fully justify the reluctance and compunction which we naturally feel in adopting any such courses and our regret at them even when we are convinced that they are right. But if the objector means to argue that our *prima facie* obligation to refrain from such acts includes any *further* legitimate basis than this for our feelings of compunction—e.g. that we rightly shrink from such acts not merely as being productive of evil but as being in some manner *per se* and ineradicably, and therefore even in this case, *wrong* as well—then he surely falls into confusion and self-contradiction ; for *ex hypothesi* the acts are in this case right, and we have already considered them and judged them to be so : any trace of wrongness about them is *ipso facto* excluded. Moreover, the experience of a surgeon may be appealed to as furnishing not only the kind of contrast with our moral feelings on which the objector relies, but also an exact parallel to them. No doubt exceptional departures from normal procedure will cause a surgeon no compunction if they involve no special evil or injury to the patient. But suppose it otherwise—suppose that life can only be saved at the loss of all power henceforward to walk or to see or to reason—will there not be the same anxious scrutiny of the necessity for such exceptional treatment, and the same regret at the necessity when proved ? Doubtless no such reluctance or regret will make the surgeon hesitate to perform the necessary operation when convinced of its necessity : but neither will it make the moral agent shirk the justified lie or breach of promise, when convinced that it is his duty. If it does, it is not a moral feeling at all, but an irrational sentimentalism, the offspring of either a confused intellect or a feeble will or both ; and it is best got rid of as soon as possible, like the spineless reluctance of a weak viceroy to enforce the law, or of a fond parent to administer a well-deserved flogging.

If so, however, the ideal utilitarian theory here, too, has an adequate answer to its critics. It can account naturally and sufficiently not only for the other features, already considered, in our experience of these *prima facie* duties, but also for the emotions that normally and properly arise when breaches of such duties are necessary and justified.

Finally, before leaving the question how we arrive at a conviction of our *prima facie* duty, I would ask whether the Provost is not, like Cudworth and Kant and every intuitionist I have

ever met, himself at times (at any rate) a utilitarian *malgré lui*. The theory which in general he advocates and repeats at the end of his chapter,¹ is that we are aware of our special obligations to particular people, and also of our general obligation to make this or that addition to the general good, by looking at each such act, or at the particular 'state of affairs' to be produced 'in itself, apart from any consequence'.² 'In both cases we have to recognise the *intrinsic* rightness of a certain type of act, not depending on its consequences, but on its own nature'. But surely his language earlier in the discussion implies the opposite of this. 'Any of the acts that we do has countless effects, directly or indirectly . . . and the probability is that any act, however right it may be, will have adverse effects. . . . Similarly, any wrong act will probably have beneficial effects. . . . Every act, therefore, viewed in some aspects, will be *prima facie* right, and viewed in others, *prima facie* wrong'.³ Evidently, then, here at least it is agreed that it is by the goodness or badness of its effects that an act is judged to be *prima facie* right or wrong. The word 'therefore' seems here to be conclusive. So, on a later page, among the reasons why I may not lie even to a liar, are quoted certain extraneous consequences of so doing—the likelihood that others will be deceived as well and the 'particularly dangerous consequences for my own character'.⁴ Would that our *advocatus diaboli* could be persuaded to remain permanently, instead of for these fleeting moments, thus transformed into an angel of light!

¹ P. 47.² P. 47 top.³ P. 41, cf. p. 33 n. 2.⁴ P. 55.

(To be concluded.)

II.—MATHEMATICS AND DIALECTIC IN THE *REPUBLIC* VI.-VII. (II.).

BY F. M. CORNFORD.

II. THE PROGRAMMES OF EDUCATION AND RESEARCH.

We need not linger over the allegory of the Cave, symbolising the whole process of education from the most naïve acceptance of any appearance at its face value up to the apprehension of the first principle of reality and truth. Emphasis falls on the need to accustom the soul's eye to the light gradually, by training in mathematics before dialectical canvassing of moral Ideas is allowed.¹

Next comes the review of the mathematical sciences. Here Plato speaks as head of the Academy, a school of statesmen directed by men engaged in the advance of theoretical knowledge. His two interests—education and research—become distinguishable. Not that they could ever be separated: the researcher is always learning, and in communicating his results he is teaching; while the student who follows those results is exercising the same faculties in rediscovering them. Plato, moreover, with his belief in teaching by conversation, aimed at a closer co-operation of researcher and pupil than can often be achieved in a modern university. In the plan of the *Republic* the interest in education overshadows research. Despite all this, the distinction is clearer in his text than in the commentaries.

As each branch of mathematics is considered, its utility in educating the mind to abstract thought is contrasted with the vulgar utility of calculation for counting objects, of geometry for land-measurement, and so on. At the same time, the gap that should be filled by solid geometry is indicated, and the

¹ 516A *συνηθείας δέουσ' ἄν*. It is here that the difference in the objects comes in. The 'visible images' of mathematical Ideas are compared to shadows and reflections in water, which the eye will take in at first more readily than the objects that cast them. Later, it will turn from these (terrestrial) objects themselves to the stars (the moral Ideas).

backwardness of research is attributed to the fact that no city holds these studies in honour. The studies are hard and 'researchers need a director (*ἐπιστάτου δέονται οἱ ζητοῦντες*), without whom they are not likely to make discoveries'. It is not easy to find one, 'and even supposing him to arise, *ὡς νῦν ἔχει*, men who are inclined to research would be too conceited to follow his guidance' (528B). Plato must have enjoyed framing the studied ambiguities forced on him by his dramatic method. *Socrates* means: 'as things are (the state taking no interest), a director, even if he arose, would not be obeyed'. *Plato* means: 'and even if a director should arise, as in fact he has, he would not be obeyed'. Athens, in a word, would do well to encourage the Academy, and in Plato and his colleagues she has directors of research ready to hand.¹ All through what follows, Plato, while laying down a curriculum of education for the Academy and for the ideal philosopher, at the same time indicates a programme for the advance of knowledge. I shall try, so far as possible, to disentangle the two.

The Curriculum of Mathematical Education (536D-537C).—The stages of education up to the point where dialectic begins are set out as follows:—

(1) The elementary education in music and gymnastic has already been outlined in II.-III.

(2) 536D-537A. All the studies in the mathematical *παιδεία* to dialectic are to be introduced to children up to the age of 17 or 18 in the form of play, not of compulsion. (The kindergarten methods of *Laws* 819B ff.—lessons in counting apples and wreaths or in grouping athletes in pairs and byes, lessons in weights and measures, etc.—will be used at the earliest stage. More advanced exercises will gradually wean the mind from dealing with apples and diagrams to thinking about abstract numbers and ideal figures. Then, as ever since, pupils would be taken through operations and proofs already set down in text-books.)

(3) 537B. Then follow two or three years of 'gymnastic' training, too severe to allow of intellectual effort at the same time.

(4) 537C. At the age of 20 a select number will be promoted to ten years' study of the same mathematical sciences from a 'synoptic' or comparative point of view. 'They must bring together the scattered pieces of mathematical learning (*τὰ χύδην μαθήματα*) they have acquired as children into a comprehensive

¹ Cf. Adam's note, and Heath, *Greek Maths.*, I., 12.

view (σύνοψιν) of the relationship of these studies to one another and to the nature of reality.' Only so will their knowledge be securely established (βέβαιος). Moreover, this test will reveal which of them are capable of going on to dialectic, where a comprehensive view, seeing many things together and finding in them a unity, is essential (ὁ γὰρ συνοπτικός διαλεκτικός). This passage echoes 531C-D: the labour spent on the pursuit of all branches of mathematics will be profitable only if it leads up to reflection on their interconnection and relationship. No further details are given; but the length of time allowed—ten years—implies that these mature students will be initiated into the results of advanced mathematical research, which, as will be seen, aims precisely at the co-ordination of mathematical truth in all branches. Some might begin to advance knowledge themselves. The training is such as is given to students for honours in mathematics at a modern university. Then, as now, it could consist almost entirely in taking fresh students over ground already explored.

Preliminary Description of Moral Dialectic in Education (531D-532D).—The first mention of the 'synoptic' study of mathematics (531D) is followed by a preliminary description of moral dialectic as the final stage of education.¹ The dialectician is one who can 'give and receive an account' of what he knows. He advances like the prisoner taken outside the Cave, who attempts to look at real things, at the stars, and finally at the sun itself. So the dialectician 'attempts, without using the senses, by means of discourse, to start (ὁρμῶν²) towards each form of reality, not giving up until he apprehends by pure intuition (αὐτῇ νοήσει λάβη) the nature of the Good itself'. He will then be 'at the culminating point of the intelligible realm' (ἐπ' αὐτῷ γίγνεται τῷ τοῦ νοητοῦ τέλει). This journey, we are told, is dialectic; the earlier mathematical discipline corresponds to the journey up the interior of the Cave and to the habituation of the eye to the daylight by looking first at shadows and reflections in the world outside. The effect of such discipline has been to lift up 'the highest thing in the soul towards the vision of the highest thing in reality'.

Here (532D) there is a pause. Glaucon next asks for a further account of dialectic on the same scale as the review of the mathematical sciences: 'what is the manner of its working, into how

¹ The second description (537D ff.) which follows the curriculum just outlined will be considered later.

² ὁρμῶν is, of course, intended to recall the ἐπιβάσεις καὶ ὁρμᾶς of 511B and to suggest the upward leap of intuition.

many kinds (*εἶδη*) is it divided, and what are its methods (*όδοί*)? Socrates replies that Glaucon will not be able to follow him further: 'You would no longer be seeing an image of what we are speaking of, but the truth itself' (*αὐτὸ τὸ ἀληθές*). The refusal partly means that no complete account of the kinds and methods of dialectic can be given here without going beyond the scope of the *Republic* into a full statement of the theory of Ideas. But Socrates' words recall Diotima's warning on the threshold of the 'Greater Mysteries'.¹ Why 'the truth itself' is represented as mysterious we shall see later. What now concerns us is Glaucon's suggestion that there is more than one kind of dialectic, and more than one method. As I read the following context, Plato does in fact briefly describe, so far as necessary limitations permit, two distinct kinds and methods, proper to research (and incidentally to education) in (a) the mathematical and (b) the moral fields respectively.

(a) *Dialectic in Mathematical Research* (533A-534B).—In this section there is no mention of the Good, but only of the truth (*τὸ ἀληθές*) and reality (*τὸ ὄν*). It gives a classification of the arts and sciences in an order of merit; describes the perfecting of mathematical science by dialectical criticism of the hypotheses in use; and revives the contrast between the existing mathematician's state of mind (*dianoia*) and the higher condition of illuminated understanding formerly called *noesis* (or *νοῦν ἔχειν*), now called 'scientific knowledge' (*ἐπιστήμη*).

The drift is as follows. The power of dialectic alone can reveal the truth to one versed in mathematical science: there is no other way. No one will deny that mathematics (as taught deductively in the *προπαιδεία*) will not suffice to lead to a grasp of the true nature of its objects; some other method is required. None of the other existing 'arts' will be of any use; some are concerned with human beliefs and desires, others with the production of natural or artificial things, or with the care of them when produced. (This covers all the arts practised in the world of appearance: the fine (mimetic) arts, agriculture, manufacture, medicine, gymnastic, etc.). There remain mathematics—geometry and the rest. These 'arts' have been described as 'laying

¹ 533A, οὐκέτ', ὃ φίλε Γλαύκων, οἷός τ' ἔση ἀκολουθεῖν, ἐπεὶ τό γ' ἐμὸν οὐδὲν ἂν προθυμίας ἀπολίποι. *Symp.* 210 (Diotima) τὰ δὲ τέλεα καὶ ἐποπτικά . . . οὐκ οἶδ' εἰ οἷός τ' ἂν εἴης (μνηθῆναι). ἐρῶ μὲν οὖν ἐγὼ καὶ προθυμίας οὐδὲν ἀπολείψω. Both places may contain a reminiscence of a (tragic ?) passage, of which fragments seem to survive (unrecognised, so far as I know) at *Rep.* 497D-E, 'τὰ γὰρ δὴ μέγιστα πάντ' ἐπισφαλῇ' and 'παρὼν δὲ τὴν ἐμὴν προθυμίαν | εἶση', where *παρὼν* can only be explained as a quotation.

hold of something of reality', but we observe that they are in a sort of dream and cannot see reality with waking vision, so long as the hypotheses in use are allowed to remain untouched and mathematicians can give no account of them. The true first principle is still unknown, and the conclusions and the whole texture (of deductive demonstration) consist of elements that are not known. 'How can such *ὁμολογία* (agreement or consistency) be called knowledge (*ἐπιστήμη*)?' The dialectical method alone proceeds, by the abolition of the hypotheses (*τὰς ὑποθέσεις ἀναιρούσα*), to the first principle, in order to make itself secure (*ἵνα βεβαιώσῃται*). It makes use of mathematics as aiding in its work of clearing the eye of the soul and gently drawing it upwards. But the mathematical 'arts' in their present condition ought not to be called 'sciences' (*ἐπιστήμας*). The state of mind of one who only studies existing mathematics is mere *dianoia*—clearer than 'belief', but dimmer than knowledge. Finally, 'knowledge' or 'science' (*ἐπιστήμη*) is substituted for *noesis* to designate (*in this context*) the highest 'mental experience', *noesis* being recalled to its first general use—cognition of any objects in the intelligible realm, as opposed to *δόξα*, cognition of the world of becoming.

The whole of this passage is concerned solely with turning mathematics into a genuine science by reducing it from an assemblage of scattered theorems, or chains of theorems, resting on unproved but demonstrable hypotheses, to a single chain depending on a single principle. No other form of science is even hinted at here or elsewhere in these Books. To say that 'such a unification of the sciences as the *Republic* contemplates would require a combination of the reduction of mathematics to logic with the Cartesian reduction of the *natural sciences* to geometry'¹ is to overlay Plato's simple programme with schemes of which he had, and could have had, no conception. In his view what we call the 'natural sciences' had no existence as distinct from the lower arts (medicine and the rest), which he has dismissed as concerned only with the world of becoming. Further, no science of logic existed; Plato was beginning to discover one, but with no very clear notion of what he was doing. It is fantastic to allege that 'a part, and not the most important part, of what the *Republic* understands by "dialectic" is 'just that reduction of mathematics to rigorous deduction from expressly formulated *logical* premisses by exactly specified *logical* methods of which the work of Peano, Frege, Whitehead, and

¹ A. E. Taylor, *Plato, the man and his work* (1926), p. 293. My italics.

Russell has given us a magnificent example'.¹ If Plato could have conceived such a reduction of mathematics to logic, the world would not have waited two thousand years for Peano and the rest to dethrone the logic of Aristotle.

What is contemplated in the *Republic* is something much simpler, though still, for Plato's time, a vision of magnificent range. The task is limited to mathematics, but it covers the whole of that field. Plato always speaks of a single principle at the head of the entire structure, not of such a collection of primitive concepts and assumptions as we find in Mr. Russell's *Principia*. The task of dialectical research is to get back, not merely (as Aristotle would have said) to the genuine hypotheses of *each* branch, but to the single principle of all mathematical deduction, and thereby 'abolish' the indefinite collection of unproved assumptions then in use. The one basic truth (*ἀρχή*) of all science will itself 'rest on no hypothesis' (*ἀνυπόθετος*), but be intuitively known with perfect clearness and unshakable certainty.

We can, moreover, state what this ultimate hypothesis will be. Since it is single, all the five sciences must be reducible to a single chain of reasoning, in the order of increasing complexity starting with arithmetic.² Now, according to Aristotle, the primitive hypothesis of arithmetic is 'the existence of the unit' (or of 'units').³ Plato in his latest phase derived numbers from the One and the 'Indefinite Dyad.' The second factor, so far as numbers are concerned, is the principle of plurality: 'Each of the numbers, in so far as it is a particular number and one and definite, shares in the One; in so far as it is divided and is a *plurality*, in the Indefinite Dyad'.⁴ If plurality can somehow be deduced from 'the existence of a One', we can dispense with the existence of the Indefinite Dyad as a second primitive hypothesis. Now the *Parmenides* (143) contains an argument which does in fact deduce a plurality of numbers from 'the

¹ A. E. Taylor, *Plato, the man and his work* (1926), p. 293. My italics. 'Example' seems hardly a fair description of one of the most brilliant of modern discoveries.

² Cf. Proclus., *Eucl.*, I., p. 75, 6: τὴν ἐπιστήμην ταύτην τὴν γεωμετρίαν ἐξ ὑποθέσεως εἶναι φαινεν καὶ ἀπὸ ἀρχῶν ὠρισμένων τὰ ἐφεξῆς ἀποδεικνύναι· μια γὰρ ἡ ἀνυπόθετος, αἱ δὲ ἄλλαι παρ' ἐκείνης ὑποδέχονται τὰς ἀρχάς.

³ εἶναι τὴν μονάδα, 76 a 35, ἡ λαμβάνεται εἶναι . . . ὅσον μονάδας ἡ ἀριθμητικῇ, b 5. Cf. Proclus, *ibid.*, p. 59, 20, ἀρχαὶ γεωμετρίας μὲν ἡ στιγμή προλαβοῦσα τὴν θέσιν, ἀριθμητικῆς δὲ ἡ μονάς.

⁴ This statement is derived, through Alexander and Simplicius (*Phys.*, 454, 22 ff.), from the Lectures on the Good. See Ross, *Metaph.*, Vol. I., p. 1x.

existence of a One', as follows. The hypothesis that 'a One exists' (εἰ ἐν ἕστιν) means that this One has existence or partakes of existence (οὐσίας μετέχει). The One itself, conceived apart from the existence it has, is 'one thing' (ἓν). The existence which it has is other than it—a second 'one thing'.¹ Also 'other' is a third thing, distinct from both.² Any pair of these three 'ones' is *two*; add a third, and you have *three*. Three is *odd*, two is *even*. By multiplication of odd and even numbers we can obtain indefinite series of numbers. 'Therefore if a One exists, number also must exist' (144A). Having thus obtained numbers from the single hypothesis 'a One exists', the deduction, as it proceeds, introduces concepts involving space (σχῆμα, 145B), motion (145E), and time (151E), not as independent hypotheses but as if they were all somehow deducible from the original hypothesis. In fact, to obtain 'by way of otherness (negation)' the Indefinite Dyad of spatial magnitude—'greater and less' or 'the unequal'—involves no more difficulty than Plato is prepared to face in obtaining the plurality of numbers from the existence of a One. Any unit of spatial magnitude is equal to itself, and the positive 'equal to' is equivalent to the negative 'neither greater nor less than'. Motion and time can be obtained in similar ways. I do not suggest that the whole deduction as stated in the *Parmenides* is intended to be valid, but the first steps seem to be guaranteed by the *Sophist*, which again explains that any proposition such as 'a One exists' involves the recognition of three terms: 'One', 'existence', and 'otherness'. This is used to convict Parmenides of contradiction when he asserts the existence of a One and yet denies plurality (*Soph.*, 244 ff.). We note that the hypotheses specified at 510C as illegitimate in arithmetic—the existence of *odd* and *even*—are 'abolished' by deduction from 'the existence of a One' (*Parm.*, 143D). If it is claimed that arguments like the above amount to a 'reduction of pure mathematics to logic', it may be replied that the whole deduction starts from the first hypothesis of arithmetic and falls within the science of mathematics itself.

A passage in Sextus (*Adv. math.*, X., 258-262) may be taken as roughly sketching the ascent to the principle as conceived by those who believe in 'bodiless Ideas, in Plato's sense', having

¹ The definition of Unity—(say) 'One is (means) that which is indivisible'—does not assert the *existence* of a one. When we add existence in the hypothesis 'a one exists' we are bringing in a second thing (the meaning of a second name).

² As shown in the *Sophist*, the meaning 'other' figures in every negative proposition of the type 'A is not (= is other than) B'.

an existence prior to that of bodies. Platonic Ideas, says Sextus, are not the ultimate principles of things; for, though each Idea taken by itself is a One (*ἓν*), as partaking of one or more other Ideas, it is two, or three, or four; so there must be something on a higher level of existence (*ἐπαναβεβηκός*), namely number, by participation in which 'one', 'two', 'three,' and higher numbers are predicable of Ideas. Sextus then describes the ascent from sensible bodies to 'the One'. Prior to sensible bodies are bodiless solid figures; prior to these the surfaces composing them; surfaces, again, are composed of lines, and prior to lines are numbers. The simplest line cannot be conceived without number: as drawn from point to point, it implies 'two'. And numbers themselves all fall under the unit (*ὕπὸ τὸ ἐν πεπτώκασιν*), 'for the dyad is *one* dyad, the triad is *one* thing, a triad, and the decad is a *single* compendium of number'. Hence Pythagoras was moved to declare that the principle of things is the Monad, by partaking of which each thing is one: considered in its own nature by itself, the Monad is a one, but combined with itself 'in respect of otherness' it produces what is called the Indefinite Dyad, a thing distinct from all the determinate dyads which partake of it. There are thus two principles: the first Monad, by partaking of which all arithmetical units are conceived as units,¹ and the Indefinite Dyad, of which determinate dyads partake.

Despite the reference to Pythagoras, all the terminology here is Platonic,² though Sextus' manner of deriving the Indefinite Dyad from the Monad is questionable. I quote the passage as illustrating the ascent from sensible bodies through geometry to arithmetic and finally to the *ἀρχή* of arithmetic, 'the existence of a One'. Plato himself indicates that the most complex sciences of the five—astronomy and harmonics—are to be studied in the form of problems capable of expression in numbers and their ratios (529D-530A, 531C). The *Epinomis* (990C-991B) elaborates this reduction of all the sciences to numerical expression.

The upshot is that the aim of dialectical research in science, *i.e.* mathematics, is first to ascend by analysis to the sole hypothesis, 'the existence of a One,' and then to complete the deduction from it of all mathematical truth so far discovered in a single chain of inference. This is a task which could be

¹ The numbers below 10 are still called 'units,' the ancient *μονάδες*, followed by the *δεκάδες* ('tens').

² Sextus' ultimate source can hardly be other than the records kept by Plato's pupils of the Lectures on the Good.

accomplished once for all. The path of further discovery in mathematics would then lie in the downward direction, solving fresh problems and extending deduction to fresh conclusions indefinitely. Little is said about the deductive part of the work, though it falls under the description of the downward movement of discourse which 'having grasped the first principle, turns back and, holding by what depends on it, descends to a conclusion' (511B). That is obvious enough, and the main interest is in the ascent. We have now formulated the whole task of research in the scientific field.

(b) *Dialectic in Moral Research* (534B-D). At 534B Glaucon, 'so far as he can follow', agrees to this conception of 'science'. Socrates then starts upon another description of dialectic: 'And by a dialectician you mean one who can take account of the reality of each thing; he who has no account to give to himself and others, to that extent has not *nous* in respect of that thing.—Yes.—And is not the same true with regard to the Good?' Here the Good is introduced as another object of which dialectic must give an account, as well as of the realities and truths of mathematics. We pass, in fact, to the field of moral Ideas. The description of dialectical method which follows, exactly fits the familiar Socratic procedure in attempting to define moral Ideas, and does not fit the procedure of dialectic in the mathematical field, just considered. The dialectician, we are told, must be able to 'formulate a definition of the nature of the Good, isolating it from all other Ideas' (διορισάσθαι τῷ λόγῳ ἀπὸ τῶν ἄλλων πάντων ἀφελὼν τὴν τοῦ ἀγαθοῦ ἰδέαν). He must, 'as it were, fight his way through all *elenchi*, determined to apply the test not of appearance (or belief, *δόξα*) but of reality, and make his way to the end through all these *elenchi* without sustaining a fall in his discourse'. Otherwise, he will know neither goodness itself nor any good thing, but only lay hold upon images by belief without knowledge, and sleep away his life in a dream, until he passes into that other world where he will sleep for ever.¹ The method is 'question and answer' (ἐρωτᾶν καὶ ἀποκρίνεσθαι).

Every phrase here fits the technique of Socratic conversation—giving and receiving an account by question and answer, in order to reach the definition of a moral term after passing through a series of *elenchi*, and so gaining knowledge in place of mere belief. The objective here is a *definition*, not, as in the mathematical field, a primitive hypothesis or assumption of existence;

¹ This echoes the parallel description of the mathematician as only 'dreaming of reality' (533B), but adds the consequence of living in a dream with respect to moral Ideas.

and the technique of arriving at correct definitions is not the same as that of arriving at the ultimate hypothesis of science. The mathematician exercises his analytical faculty in penetrating to a prior truth; but he will not have to 'fight his way' through a series of *elenchi*. When he 'abolishes' demonstrable hypotheses, he does so by going behind them and showing how they can be obtained by deduction and finally confirmed (*βεβαιούν*). But the 'hypothesis' of moral dialectic is an hypothesis in the original sense—not a true and demonstrable assumption of existence, but an inadequate tentative definition, suggested by the respondent, submitted to criticism by the questioner in the *elenchus*, and either amended or abandoned altogether. It is transformed or destroyed by criticism, and never restored or confirmed by subsequent deduction. Such suggestions are mere stepping-stones which are kicked away in the ascent to the correct definition.

In the procedure so often illustrated in the dialogues, the opposite movements of intuition and deductive argument both figure at each stage of the ascent. Suppose the objective to be the true definition of Justice. The respondent puts forward his *suggestion* (hypothesis) that Justice means paying one's debts. He has before his mind a dim vision of what Justice is; he tries to see the nature of Justice and to put it into words.¹ This is an effort of intuition, for which *καθορᾶν* is often used—an effort to see the unity in a number of things. The formula (*λόγος*) produced is a bad attempt, an imperfect, one-sided account of the nature of Justice. Here the questioner intervenes with his *elenchus*. Taking the *suggestion* as a *supposition*, he leads the respondent through a deductive argument showing that some consequence results which the respondent will see to be unacceptable as conflicting with other beliefs he holds as strongly.² The first hypothesis is now abandoned. The questioner's argument, if skilfully conducted, may have brought to light considerations that will help the respondent in his next attempt; or the questioner may enlarge the 'synoptic' view by an *ἐπακτικός λόγος*, 'adducing' instances that have been overlooked. The respondent, by another effort of intuition, substitutes a second suggestion. This ought to be closer to the true meaning, which

¹ Laches well describes the state of mind: 'I seem to myself to have a notion of what courage is (*νοεῖν περὶ ἀνδρείας ὃ τι ἐστίν*) but somehow it has eluded me so that I cannot catch it and put it into words (*συναρᾶν τῷ λόγῳ*) and say what it is' (*Laches*, 194B).

² Cf. *Theaet.*, 165D. Theaetetus admits he has been led to a conclusion which is *τάναντία οἷς ἐπεθέμην*.

he is beginning to discern more clearly. The deductive *elenchus* is once more applied; and so the conversation goes on till, after 'fighting his way through all the *elenchi*', the respondent sees quite clearly the nature of Justice, and can now 'isolate it from every other Idea' and circumscribe it in a formula (*διορίσασθαι τῷ λόγῳ*). In place of mere belief, he has knowledge, which the two together have reached by using hypotheses as 'positions laid down for discourse to mount upon and take off from' in a series of leaps, each of which 'abolishes' the previous stepping-stone.¹

Even so, however, the respondent has as yet only one piece of knowledge. He must mount further to the supreme Idea in the moral field, and define the nature of the Good. Only then will the full significance of the truth discovered be seen in its relation to the rest of truth. If he stops short, his definitions of Justice and other Ideas, though correct, will be analogous to a mathematical hypothesis that is true but awaits deduction from the first principle. But, if he can reach the Good, he will 'acquire *nous*' (*νοῦν ἔχειν*, 534B), that illuminated vision of the whole field which can only be had from the summit.

The philosopher can then make the final descent: he can 'give an account', not only of one piece of knowledge, but of the whole. He will deduce (presumably in the form of a 'division') all the subordinate moral Ideas, 'descending through Ideas to Ideas and ending with Ideas'. The results of this research, if they could ever be set down in writing, would amount to a complete system of moral philosophy, securely deduced from the definition of Goodness. Such is the complete programme of research in the moral field.

¹ The *elenchus* has some resemblance to the *reductio ad absurdum*, which 'assumes what conflicts with the desired result, then, using that as a supposition (*τοῦτο ὑποθεμένη*), proceeds until it reaches an admitted absurdity and by thus destroying the hypothesis confirms the result originally sought (*τὴν ὑπόθεσιν ἀνελούσα βεβαιώσεται τὸ ἐξ ἀρχῆς ζητούμενον*)' (Proclus, *Euc.*, I, p. 255, 8 ff.). Proclus classes the *reductio* with Analysis as being a method which moves upwards 'towards premisses' (*ἐπὶ τὰς ἀρχάς*), in contrast with deduction (*ἀπὸ τῶν ἀρχῶν*); but Analysis (like mathematical dialectic) posits premisses (*θετικὴ τῶν ἀρχῶν*), while the *reductio* is (like Socratic dialectic) *ἀνααιρετική*, completely destroying the hypothesis, which is false and not to be re-established. At *Phaedo*, 101D, Socrates lays down that criticism of a hypothesis in dialectic must not begin until the consequences of assuming it have been deduced and it is seen whether they are consistent with one another. When the time comes to give an account of the hypothesis, a second higher (*ἄνωθεν*) hypothesis must be assumed, and so on until 'something satisfactory' is reached. (If the consequences are inconsistent, we have a sort of *reductio* destroying the hypothesis; if consistent, we continue the Analysis upwards.)

Final Description of Moral Dialectic in the Curriculum of Education.—Now that we have clearly distinguished the aims and methods of dialectical research in the mathematical and moral fields, we may return to the curriculum of education which follows next (535A), and consider what place dialectic of either kind has in it.

The mathematical *προπαιδεία* we have already considered. It ended with ten years' 'synoptic' or comparative study of mathematics. In this field, as we remarked, the task of research at the upper end of the science could be done once for all. The deduction of all mathematical truth already discovered from 'the existence of the One' could be set down in a continuous written discourse for students to study. During his ten years' advanced course, the competent pupil would work over the whole of this ground, rediscovering what was already discovered and perhaps making a beginning of research. Mathematical dialectic evidently belongs to this synoptic stage of scientific education.

But the guardians are to be trained also for the practical exercise of moral functions in statesmanship. A select few must be carried further into the field of the moral Ideas. Their training here will occupy the next five years, from 30 to 35 (539 C-D). The immediate object of the educator is 'to test them by philosophic conversation and find out which of them are capable of renouncing the eyes and the other senses and advancing in the company of truth towards reality itself' (537D). The demoralising effect of premature questioning of received moral beliefs is described at length; it leads to lawlessness and a taste for eristic disputation.¹ Only mature students of stable character must be admitted. Even so, not everyone tested by this five years' course of dialectic will attain to a full vision of the Good. At 540A the revelation of the Good is separated from the course of moral dialectic by an interval of fifteen years (35-50) spent in subordinate military and civil offices. Then, the few who come through all these tests in education and practical life will be 'brought to the goal'. This is described in mystical terms. They are 'constrained to lift up the light (vision) of the soul and fix it upon that which gives light to all things, seeing Goodness itself'.

The reader has not been prepared to find the vision of Good

¹ Here, as earlier at 498A, Plato virtually admits that Socrates had 'demoralised' some of his young companions by encouraging them to canvass received morality without first undergoing a severe training both in abstract thinking and in practical discipline.

separated in time from training in moral dialectic. In the programme of research there is, of course, no break. But in the education described in the *Laws* we again find two stages. Only a small number of students will be capable of a really thorough study of arithmetic, geometry, and astronomy (818A). Where the higher education is introduced (965B) the 'synoptic' view is stressed: they must be 'able not only to see the manifold but to press on towards the one (*πρὸς τὸ ἐν ἐπείγεσθαι*) and, having recognised it, to bring all into order with reference to it in a comprehensive view' (*πρὸς ἐκεῖνο συντάξασθαι πάντα συνορώντα*). A thorough study and vision (*θεῖα*) of any object is possible only to those who can turn their gaze from the many and dissimilar to the single form. Such will be constrained to see clearly the unity (*ἕν*) which pervades the four great virtues, courage, temperance, justice, and wisdom, and which deserves the single name of *moral goodness* (*ἀρετή*). They must be able to state the essential nature of this unity—in what sense it is a single thing, or a whole, or both (965B-E). This study, confined to the moral field, may represent the ground covered in the five years' course of the *Republic*. Then the Athenian observes that the same may be said *περὶ καλοῦ τε καὶ ἀγαθοῦ*: the Guardians must know 'in what manner and sense each of these is a unity' as well as a manifold; and they must be able to express their knowledge of *all forms of goodness* (*περὶ πάντων τῶν σπουδαίων*) in explicit discourse (966A-B). This wider knowledge, going beyond moral virtue to include all forms of goodness, may correspond to the final vision of the Good reserved in the education of the *Republic* for the age of 50, as well as to the goal of research earlier described as 'defining the nature of the Good'.

We have reached a stage where the distinction between education and research can hardly be maintained. Plato would not hold that the results of research in the moral field could, like the results in mathematics, be set down in a text-book, even of 'teleological algebra'.¹ Each generation of philosophers would have to be led to the goal through living intercourse with others who had attained it or come nearer to attaining it. They must all fight their way through the *elenchi* of conversation and discover for themselves a knowledge that cannot be conveyed by instruction.

¹ The existence of such a science was first recognised by Burnet (*Greek Philos.*, I., 230): 'the whole of science would thus be reduced to a sort of teleological algebra', and seems to be accepted by Prof. Taylor (*Plato, the man*, etc., 1926, 294); but its nature will remain obscure until some proposition in the science is produced.

The Descent of the Philosopher and the Statesman (540A-B).—The descent is briefly described. When the philosopher has seen the Good itself, he will for the rest of his life divide his time between research (*φιλοσοφία*) and the practical duties of the supreme ruler. In mathematical research he will work at extending and perfecting the structure of mathematical science. In the scientific and the moral fields alike, as educator he will train others like himself to succeed him (*ἄλλους δὲ παιδεύσαντας τοιούτους*). As statesman, he will legislate, like Moses when he came down from the vision on Sinai bearing the tables of the law.¹ Using the nature of the Good as a 'pattern', he will create order (*κοσμεῖν*) in his city and in his own soul and the souls of others. (This is the Pythagorean reproduction in the soul and in society of the cosmic order disclosed in research and education). Finally, he will be worshipped after death as a *dæmon*, or at least as *εὐδαίμων* and a 'divine' man.

PROGRAMME OF RESEARCH.	AGE.	PROGRAMME OF EDUCATION.
	—17 (18)	Music and Gymnastic.
		Elementary Mathematics.
	17 (18)—20	Gymnastic only.
ASCENT (outside the Cave)		
MATHEMATICAL DIALECTIC: criticism of hypotheses, ascending to the genuine <i>hypothesis</i> ('the existence of a One').	20—30	Comparative Mathematics and MATHEMATICAL DIALECTIC.
MORAL DIALECTIC: study of moral Ideas, ascending to the <i>Definition of the Good</i>	30—35	MORAL DIALECTIC: criticism of received belief, leading to the <i>Unity of moral goodness</i> .
	35—50	Subordinate office.
	50	<i>Vision of the Good</i> .
DESCENT		
of PHILOSOPHER		of STATESMAN (into the Cave)
Theoretical Deduction of all pure Mathematics	50—	Practical legislation, rule, and training of successors.
Theoretical Division of all moral Ideas		Death and <i>dæmon</i> -worship.

¹ Florus in Plutarch (*Quæst. Conv.*, VIII., 2, 2) remarks that the Socrates of these Books of the *Republic* has an admixture of Lyncurgus as well as of Pythagoras, as Dicæarchus thought: Πλάτων . . . ἄτε δὴ τῷ Σωκράτει τὸν Λυκούργον ἀναμειγνύς οὐχ ἦπτον ἢ τὸν Πυθαγόραν, ὥς φητο Δικαίαρχος. Not the historic Socrates!

The Unity of the Goal.—The above table shows the results of disentangling the threads of Plato's web. The object has been to bring out two points: (1) that the programme of research, which is progressive, can be distinguished from the programme of education, which is recurrent—each new generation of students being taken over so much of the course as they are fit for; and (2) that dialectical procedure is not the same in the mathematical as in the moral field, though the exercise of intuition and deductive reasoning is common to both. When the threads are kept apart, there seem to be three conceptions of the goal of knowledge: (a) the apprehension of 'the existence of the One' as the single hypothesis from which all mathematical propositions can be deduced; (b) the formulation of the definition of the Good, as the supreme Idea from which all subordinate moral Ideas can be derived; (c) the vision of the Good, as an experience comparable to the *ἐποπτεία* of the religious mystery.¹ But, by weaving his threads into one pattern, Plato means that the three goals are really one.

In the first place, the mathematical and moral Ideas are not so sharply distinct in Plato's mind as in ours. They meet in the conceptions of rhythm and harmony. Man is the only creature that attains to the consciousness of order (*τάξεως αἴσθησις*), which in the motions of the body is rhythm, and in the organisation of vocal sound is harmony: the two are combined in *χορεία* (*Laws*, 664E). The aim of early education in music and gymnastic is to create *εὐαρμοστία εὐσχημοσύνη εὐρυθμία εὐήθεια*, the physical and moral rhythm and harmony that 'steal into the soul' through music (*Rep.*, 401D), and that reasonableness (*εὐλογία*) which is the beginning of intellectual understanding (411D). These words are recalled as a preface to the review of mathematical training in VII. That early schooling in music and gymnastic was a training by habituation (*ἔθεσι παιδεύουσα*), communicating, as regards harmony and rhythm, only *εὐαρμοστία* and *εὐρυθμία*, not knowledge; and in discourse (*λόγοι*) only a corresponding habituation (*ἔθῃ*, customary intellectual and moral beliefs, accepted on authority), not any form of study that will lift the eye of the soul to see reality (522A). Then, at the end of the mathematical curriculum, in the account of astronomy and harmonics, there emerge the two conceptions of *συμμετρία* (530A) and *συμφωνία* (531A-C), as manifest in the proportions and consonant ratios of numbers, illustrated by the rhythmical

¹ *Plut., Quæst. Conv.*, VIII., 2, 1. Geometry draws us from the sense-world, *ἐπὶ τὴν νοητὴν καὶ αἰδίων φύσιν, ἧς θεὰ τέλος ἐστὶ φιλοσοφίας οἶον ἐποπτεία τελευτῆς*.

movements of the heavenly bodies and the audible harmonies of music. These conceptions are common to the scientific and the moral fields; it is as leading to them that mathematics is 'useful for the inquiry after τὸ καλὸν καὶ ἀγαθόν' (531C), the principle which pervades all forms of physical, moral, and intellectual beauty and perfection (*Symp.*, 210). The *Laws* (967D-E) connects the enlightened study of astronomy with the fundamental truths of morality and religion. No man can be 'securely god-fearing' who does not know that soul is immortal and prior to the bodies it rules, and also discern the intelligence (νοῦς) revealed in the motions of the stars, together with the necessary preliminary sciences (the rest of the mathematical προπαιδεία). He must also observe what these have in common with Music (synoptic study), and turn his knowledge to harmonious uses (συναρμολόγησιν) in the establishment of moral practice and institutions (the descent of the statesman); and he must be able 'to give an account of everything of which any account can be given' (the dialectical descent of the philosopher from the principle of which no account can be given). These places and many others reveal the intimate connection between the intellectual and moral phases of truth and reality in the cosmos. They explain why Plato can speak of the mathematician's ascent to the existent unity or 'One Being' as if it were the same as the dialectician's ascent to the unity pervading all forms of moral goodness, or the definition of τὸ καλὸν καὶ ἀγαθόν.

Why is the apprehension of the first principle called a vision or revelation which comes 'suddenly' (ἐξαίφνης, *Symp.*, 210E)? In the *Symposium* and the *Phaedrus*, as well as in the *Republic*, Plato adopts the language of the Eleusinian mysteries. It is appropriate because initiation ended with the ἐποπτεία, the sight of certain sacred objects 'in a blaze of light', coming after a long process of purification and instruction (λεγόμενα) in the significance of the rites that had been witnessed (δρώμενα). So Plato's course of intellectual instruction by verbal discourse, in mathematics and dialectic, is a passage from darkness to light, and ends with an experience of a different order—a vision. The criticism of mathematical hypotheses led up to the formulation of the genuine hypothesis: 'Let there be a One.' As an object of intellectual understanding, this is no more mysterious than any other proposition in mathematics. Moral dialectic, again, led up to the formulation of a definition (διορίσασθαι τῷ λόγῳ) distinguishing the nature of the Good from all other Ideas. A defining formula is expressed in words; it can be written in a book and intellectually understood, like the definition of any

other Idea. By means of it the dialectician can 'give an account' of derivative moral truths, and even teach them to men who will never be philosophers. But the intellectual understanding of formulæ expressed in words is not the same as the intuitive vision of the reality which the formulæ profess to describe. Plato's whole theory of knowledge is a development of Socrates' conception of the knowledge which is wisdom and virtue—that imperious insight into what is really good for us, which cannot fail to determine will and action. It is not the continent or incontinent man's intellectual 'belief', which tells him truly what he ought to do, but may fail to govern his actions: 'I know this is right, but I want to do that.' This is the difference between knowing a thing and knowing about a thing. Socrates refuses to give Glaucon a definition of the Good or a complete account of dialectic because Glaucon and the readers of the *Republic* have not undergone the severe training required before they could even understand his meaning; still less would they see the reality behind the verbal formula: 'You would no longer be seeing an image, but the truth itself.' 'There is not, nor shall there ever be, any writing of mine on this subject. It is altogether beyond such means of expression as exist in other departments of knowledge; rather, after long dwelling upon the thing itself in a common life of philosophic converse, suddenly, as from a leaping spark, a light is kindled, which, once it has arisen in the soul, thenceforward feeds itself' (*Ep.* VII., 341). Aristotle, in a much misused passage, says that 'the initiated do not need to understand something, but to have an experience and be put in a certain frame of mind'.¹ This does not mean that no doctrines were implied or taught in the Mysteries, but that the goal was not to understand the hierophant's discourse but to 'learn by experience' (*παθεῖν μαθεῖν*) what discourse cannot express, and thereby pass into a new state of mind. Plato's metaphors for the vision were drawn from contact and marriage: the soul finds rest from the travail of desire in union with that which is akin to it; then *nous* and truth are born, knowledge and true life are nourished (490B). It is hard for some to imagine an impersonal passion for truth strong enough to warrant such language; and it is only too easy to fall into sentimental anachronism and find the Amor of the *Divine Comedy* in the Eros of the *Republic* and *Symposium*. The experience Plato means is, I believe, rather an act of metaphysical insight or recognition than what we should call a 'religious' experience—

¹ Frag. 45, τοὺς τελουμένους οὐ μαθεῖν τι δεῖν ἀλλὰ παθεῖν καὶ διατεθῆναι.

certainly nothing of the nature of trance or ecstasy. But the knowledge is of a kind in which the soul is united with the harmonious order it knows, an insight which harmonises the soul's own nature and illuminates the entire field of truth. Up to that moment the philosopher has used his powers of intuition and intellectual understanding, but only at that moment does he 'begin to have *nous*'. He becomes a god, knowing the true from the false, the good from the evil, and incapable of error and wrong-doing.

III.

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III.—DESCARTES' PROOF OF THE EXISTENCE OF MATTER.

BY A. K. STOUT.

PROFESSOR ÉTIENNE GILSON'S recent book ¹ on the influence of mediæval thought on the Cartesian system must be welcomed by every student of the history of philosophy as one of the most important and original contributions to the study of Descartes. By revealing the sources and history of the fundamental principles of the Cartesian philosophy, known to many modern students mainly in the form given to them by Descartes and his disciples, M. Gilson has helped us to put ourselves into Descartes' place and to see his philosophy through his own eyes. Continuing the use of the historical method begun nineteen years ago in his *La Liberté chez Descartes et la Théologie*, he has thrown still further light on the way in which Descartes' problems presented themselves to him, and on the new turn which he gave to the principles he inherited. The question of interpretation discussed in this article was suggested by what seemed to me an inadequate treatment of it in M. Gilson's book; for this reason, and because his work is likely for some time to come to hold the field as the most authoritative guide to the interpretation of Descartes' thought, I have thought it not out of place to include in my own treatment of the question a brief discussion of his handling of it. There is besides a special reason, in that the difficulty I find in his account turns on the part played in the Cartesian proof of the existence of matter by the natural impulse to believe, usually called by Descartes 'the teaching of nature'. I venture to suggest that M. Gilson underestimates the importance of this, and I have tried in my own account to reinstate it as a fundamental part of the argument. This question has an interest beyond the bounds of Cartesian interpretation, as similar instinctive beliefs have since played, and will probably continue to play, an important part in the history of the theory

¹ *Études sur le Rôle de la Pensée médiévale dans la Formation du Système Cartésien.*

of knowledge. They occupied a prominent place in the epistemology of Reid and his school; but while the failure to distinguish between clear and distinct perception on the one hand and the instinctive tendency to believe on the other is perhaps the main weakness of Reid's answer to Hume, we shall find the distinction and relation between the two clearly marked by Descartes. The most recent English writer to attach importance to the instinctive belief in the existence of the external world is Mr. C. D. Broad, but while he is, like Descartes, quite clear about the distinction which Reid blurred, he holds, apparently, that we have *only* an instinctive belief, and no clear and distinct knowledge of an external world.

I propose first to give a summary of what I take to be Descartes' proof; next, to amplify this summary by more detailed reference to particular passages; and finally to explain how M. Gilson's account seems to me inadequate.

The fullest statement of the proof is to be found, of course, in the *Sixth Meditation*. I pass over the preliminary argument based on imagination, because Descartes himself does not regard its conclusion as more than highly probable. The main argument starts from the existence of sensations and may be divided into three stages: ¹

(1) I find myself passive in the reception of sensations (including the ideas of sensible objects); they come without needing my consent, and often against my will. This experience proves that I cannot myself be the cause of them, and leads me to ask what their cause is, and particularly whether it contains formally or merely eminently the perfection contained objectively in the ideas (more simply, though less precisely, whether the cause of these ideas is like the ideas or unlike them: whether it is matter, or something 'superior' to matter—God or an angel).

(2) No sooner is this question raised than I find that in my practical everyday life I have always assumed the answer. I 'am taught by nature' ² or 'have a very strong inclination' to believe that these ideas are caused by corporeal objects, like

¹ See especially *Med.* VI., pp. 78-80 of Vol. VII. of Adam and Tannery's edition of the works of Descartes. All subsequent page-references to Descartes' writings refer, unless it is otherwise stated, to *Med.* VI., as contained in Vol. VII. (the Latin version) of this edition.

² Latin: 'Doctus sum a natura'; French: 'La nature me l'enseignait' or 'J'ai appris de la nature'. Veitch, of whose translation of the *Méditations* I have made free use in this article, frequently renders by the phrase 'dictates of nature'. I have rather reluctantly refrained from using this, as it suggests an authoritativeness which I think Descartes intends, but which neither the original nor our word 'teaching' implies.

the objective content of the ideas ; nor have I any means of proving the contrary.

(3) If this teaching of nature were fundamentally and inherently misleading, and at the same time incorrigible by suspense of judgment and the application of the natural light, I should have to confess that God, the author of my nature, has deceived me. But I have proved that God is no deceiver. Therefore as much of the teaching of nature as is not corrigible by the natural light must be true. The belief 'that corporeal objects exist'¹ stands this test ; but when it comes to beliefs about the nature in detail of particular objects presented by the senses I cannot be sure, for their evidence is often obscure and confused, and has actually misled me. I can be sure only that 'all that I clearly and distinctly conceive as in them, that is, generally speaking, all that is comprehended in the object of speculative geometry, really exists external to me'.²

The nature God has given me teaches me that extended objects are the causes of my ideas of them.³ Scrutinising this belief, without thought of its source, I cannot by the natural light prove it either true or false, but I am certain of its possible truth, because the natural light tells me that God *can* produce what is clearly and distinctly conceivable.⁴ Finally, taking into account the source of the belief as rooted in the nature which God has given me, I see by the natural light that its falsity would be inconsistent with the proved veracity of God, and that consequently the belief must be true. It thus becomes for the philosopher not the belief which it is for the ordinary man, but knowledge, founded on the innate idea of God.

That is what I take to be the main thread of the argument. Most of the rest of the *Meditation* consists in a discussion of what is meant by 'nature' in the phrase 'teaching of nature', and what it really teaches. The object is to show how much of nature's teaching is corrigible by the natural light (and therefore not guaranteed by God's veracity), and how much is incorrigible and must therefore be accepted as true. This is necessary to meet the obvious objection that some apparent teachings of nature prove to be false ; how then can the teaching of nature, as such, be guaranteed by God ?⁵

¹ P. 80, l. 4.

² P. 84, ll. 7-10.

³ It may appear at first sight to teach me more than that about these causes, but so much at least is included in its teaching.

⁴ P. 71, ll. 14-16.

⁵ Descartes has a choice of terminology. He can either speak of certain teachings of nature as partially misleading, but containing truth, or refuse.

There are, then, three main factors in the proof: (a) sensations (a term which for Descartes includes not only 'ideas of sensible objects' but pleasure and pain, hunger and thirst),¹ (b) the teaching of nature, and (c) the natural light (or rational argument).² The natural teaching or impulse to believe is always occasioned by some sensation, but its ultimate source is, of course, God. In spite of the repetition of the word 'nature', (b) and (c) are sharply distinguished by Descartes.³ They are 'widely different'. 'What the natural light shows to be true can be in no degree doubtful', and it is the only trustworthy source of certainty, while the teaching of nature is merely a spontaneous impulse to believe, carrying no guarantee of truth with it. It is the union of the two which is so strong. The truth of the spontaneous and irresistible belief, which cannot be directly disproved by the natural light, becomes actually established by it through the veracity of God; for it is evident by the natural light that there exists a veracious God whose nature is incompatible with the fundamental falsity of a natural and rationally incorrigible impulse to believe. The fruit of this union is the proof of the existence of matter.

I have shown the relation between these three factors in the proof of the existence of matter in general. But besides the

to call any belief a teaching of nature in so far as it misleads. It is the latter course which after hesitation he finally chooses; and we therefore find a gradual narrowing down of the denotation of the phrase, by the rejection of what is not, but seems to be, the teaching of nature. Note, for instance, how in the French version (revised by Descartes himself) of *Med. III.*, where he is saying that natural impulses may mislead in the choice between right and wrong in action, the 'impetus naturales' of the Latin version become 'des inclinations qui me semblent aussi m'être naturelles' (compare Vol. VII., p. 39, ll. 1-2 with the corresponding passage in IX., p. 30, *ad. fin.*). In *Med. VI.* the qualification is made in both versions (Vol. VII., p. 82, l. 1 and IX., p. 65, l. 5). He would perhaps have found it easier to express his meaning if he had chosen the former course; for he is left with beliefs of which it is easier to say (as indeed he sometimes does) that they are teachings of nature containing some truth, than that they are divisible into distinct judgments, of which some are and some are not teachings of nature.

¹ Cf. pp. 74-75.

² This identification is not strictly accurate. The natural light is the power of knowing which each of us has, as a purely thinking or rational being. It is perhaps nearer to intuition than to reason. Any self-evident truth is said to be known by the natural light, and in a valid rational argument not only the truth of the premises but the logical implication of the steps with one another and with the conclusion must be known in the same way. Thus rational argument is illumined by the natural light and impossible without it.

³ Cf. especially *Med. III.*, Vol. VII., p. 38, l. 23-p. 39, l. 5.

general propensity to believe in the existence of body, there are three more special teachings of nature (occasioned by special sensations) connected with it and supplementary to it. These are (1) 'That I have a body which is ill-affected when I feel pain, and stands in need of food and drink when I experience the sensations of hunger or thirst, etc.'¹ (2) That my mind is 'so intimately conjoined with my body' that the two 'compose a certain unity'.² (3) That my own body is surrounded by many other bodies, some of which I have to seek after and others to shun.³ These special teachings stand in the same relation to sensation and to natural light as does the more general teaching of nature. In every case the sensations are, not premises in a rational argument, but occasions for a teaching of nature, and it is on the teaching of nature, not directly on the sensations, that the rational argument is founded. All rational arguments for the existence of the material world are inconclusive when taken apart from the spontaneous impulse to believe.

To establish this contention let us examine the three natural teachings in question. The first two are occasioned by organic sensations. (1) There is first the sensation—*e.g.*, of hunger. This raises the question—what do I want? The answer (that my body needs food) is at once furnished by nature—not by the natural light, for that is rational, while this teaching of nature gives me a useful piece of information without any rational ground for believing it. "When I inquired the reason why this indescribable twitching of the stomach should put me in mind of taking food, I was unable to give any explanation, unless that I was so taught by nature; for there is no affinity, at least none that I am able to comprehend, between this irritation of the stomach and the desire for food."⁴ But the only source of philosophical certainty is the natural light. This, directed on the above teaching of nature, (*a*) is unable positively to prove it either true or false, when taken by itself, but also (*b*) proves it to be not fundamentally misleading, when taken in conjunction with the already proved veracity of God. Descartes' language is: 'I ought not to doubt that there is some truth in these informations'.⁵ My hunger, thirst, pain, etc. are each the occasion of a spontaneous belief that I have a body which is in need of something. These beliefs are given me by my Creator to guide me as to what is for my good before I am able to discover the reasons for them by the natural light; if I had to wait for this scientific knowledge of my own body before I ventured

¹ P. 80, ll. 27-31.² P. 81, ll. 1-5.³ P. 81, ll. 15-17.⁴ P. 76, ll. 6-16 (shortened).⁵ P. 80, ll. 30-31.

to eat or drink or escape from a fire, I should obviously die. My Creator being good, these teachings of nature cannot be fundamentally misleading. If it were false that I had bodily needs, or if my nature were not on the whole a reliable guide to them, then its teaching would be fundamentally misleading, and God a deceiver. It is true that on exceptional occasions (*e.g.*, when I am ill) I am misled about what is for my own good; but my nature being human, and therefore imperfect—my body being a mechanism and united by only one small part of itself with my mind—its teachings cannot be infallible, and God has made them as reliable as is possible for such a being as I am.¹

(2) Once more the sensation is the means by which nature teaches me. "Nature teaches me by these sensations that . . . my mind and body compose a certain unity".² In feeling bodily pain I recognise my body as an integral part of what I call myself. I spontaneously believe not only that I have a body but that I (that is, my mind) am 'as it were fused with it'. I do not and cannot believe myself to be observing it as a spectator ('as a pilot in a vessel'). But this is merely a teaching of nature, and must be directly tested by the natural light before it can seek confirmation from the veracity of God. Does the natural light prove that my mind and its body are not so related? On the contrary, the teaching of nature on this point is corroborated by the clear and distinct idea I have of my mind as a thinking thing. If my mind were working freely, and its only relation to its body were that it possessed an idea of it, it would not feel pain or hunger, but would have a clear and distinct understanding of the condition of the body and of the treatment or food required to set it right, exactly similar to the scientific knowledge which a physicist may have of a material phenomenon under investigation. Plainly I have no such thing. Hunger and thirst are confused, not clear and distinct, modes of thinking. The natural light, therefore, confirms the teaching of nature, which is now entitled to claim the sanction of God's veracity.³

¹ Cf. below, pp. 198-200.

² P. 81, ll. 1-5.

³ It must be admitted that the passage interpreted above is ambiguous. Its form is: 'Nature teaches me through sensation the union of my mind with its body. For otherwise I should not feel pain, etc., but should understand clearly and distinctly what is wrong with my body.' If we take the verbal form of the passage strictly, Descartes seems to be saying that the rational argument from the nature of the mind as a thinking thing is the teaching of nature. But he can hardly mean this, for the teaching of nature is everywhere else contrasted, as something non-rational, with the clear vision and self-evidence of the natural light. Some interpretation of the word 'for' is therefore necessary, and that given in the text is not

(3) The third special teaching of nature about body is that there are distinct and separate bodies of different kinds interacting with my own, some hurtful to me and some beneficial. Differences in the quality of the sensations—*e.g.*, differences of colour, of temperature, of hardness and softness—lead me spontaneously to believe that there are corresponding differences in the material world; and their pleasantness or unpleasantness teaches me that some are useful and some harmful to me (and by 'me' I here mean the composite whole of body and mind which nature teaches me that I am). If the natural light is brought to bear on this teaching it leaves it fundamentally unshaken. The belief that different kinds of sensations are caused by different kinds of objects, and that my instincts are on the whole a reliable guide to my needs, withstands criticism, and is therefore confirmed by God's veracity. But nature seems to teach more than this: she seems to teach that the differences in the objects are *like* the differences in the sensations. This the natural light easily disproves, taking account of illusions and dreams, and making the distinction between primary and secondary qualities. Whether or not we regard these further beliefs as part of nature's teachings, their falsity is not inconsistent with God's truthfulness, for He has given us a power of correcting them.

None the less, why should not nature's teachings be wholly free from error? The reason is to be found in what we might call the biological utility of the more special instinctive beliefs, which presuppose the existence of external objects and the fundamental connexion between mind and body. Now that I know my nature to consist in a union between these two, the term 'nature' as used in 'the teaching of nature' may be re-defined. I had previously defined nature as 'God himself, or the order and disposition established by God in created things', and my nature as 'the assemblage of all that God has given me'.¹ So understood, my nature would include what belongs to my mind alone, namely the natural light,² which is quite other than the teaching of nature, and needs no guarantee from God. I now make use of nature's own teaching to define it as a teacher. I mean by 'nature' in the phrase 'teaching of nature', 'the things which God has given me as a being composed of mind and body'.³ As such, I cannot have clear and distinct ideas,

only the simplest but the only one that seems to me to square with Descartes' general position. 'For' introduces not an explanation of what has gone before (this particular teaching of nature), but an argument corroborating it.

¹ P. 80, ll. 21-26.

² P. 82, ll. 17-21.

³ P. 82, ll. 23-25.

which belong to pure mind. But I stand in need of practical guidance long before I can form clear and distinct ideas, and on matters about which I may never be able to form them. If I had to wait until I had scientific knowledge about the action of food on my body before I ventured to eat, or of fire on my hand before I withdrew it from the flames, I should not survive to acquire the knowledge. God has therefore provided me, as a composite whole of mind and body, with a nature which teaches me by the sensations of pleasure and pain, and in other ways, to pursue what is good for me and to shun what is bad. All the teachings of nature have this biological value and practical truth in some degree, but the fundamental beliefs in the existence of extended substance and in the union of body and mind are in addition of great theoretical importance. They are not only useful in preserving life, but upon them depend the cardinal tenets of science and philosophy. Without extended bodies science would have no basis; without assurance of the connexion between body and mind we should be unable to start from the perceptions of sense as data—from the appearances for which science has to account. We have seen that these fundamental beliefs withstand critical examination. We are now in a position to answer the question why my more specialised beliefs about the external world are not equally free from error. Their purpose is primarily to enable me to preserve my life, and for this purpose they are adequate and so far true.¹ If I try to make them do the work of the natural light, and 'use them as infallible rules by which to determine immediately the essence of the bodies that exist out of me',² I am deceived through my own fault, since God has given me a faculty by which I can discover the truth in these matters. Such erroneous beliefs as that secondary qualities belong to the external world, or that the apparent size of things is their real size (*e.g.*, that a candle-flame is bigger than a star) are readily corrigible by the natural light, if only I take the trouble to use it.³

Descartes has not, however, entirely refuted the charge of proving too much. For even those teachings of nature which have a purely biological purpose sometimes practically mislead. This may happen, for example, in illness. A typical instance is that of the man suffering from dropsy, who feels thirsty when drink is bad for him. Descartes spends several pages at the end of the *Meditation* in reconciling such apparent deceptions

¹ P. 83, ll. 14-23.

² P. 83, ll. 19-21.

³ P. 82, l. 27-p. 83, l. 14.

with the goodness of God ;¹ that he takes so much trouble, in a *Meditation* about the existence of matter, to reconcile apparent falsity in the teaching of nature with God's veracity, supports the contention that that teaching is an integral part of the proof.

He rejects at the outset a possible solution of the difficulty, and in doing so lays the foundation of his final solution. It is not enough, he says, to urge that the sick man's nature is corrupted, for even if it is, he is no less a creature of God. This leads him to ask, in a remarkably Spinozistic passage, what we mean by a corrupted nature. If we consider the body by itself, as a very complex machine, we can only speak of it as corrupted if we regard it as an instrument made by God in order that it may behave in the way in which an ordinary healthy body behaves. But this is only our way of looking at it. We are regarding it as we regard a man-made instrument, such as a clock, whose 'nature' may be said to be 'corrupted' when its works go wrong and it ceases to perform properly the function for which it was made. This is forcing our own view of nature on the world. The truth is that both the clock and the human body obey the laws of nature just as completely when they 'go wrong' as when they work according to our wishes.²

The final solution turns on two points :—

- (1) The mechanical nature of the body, with its consequent limitations (he has already prepared the way for this), and
- (2) The fact that 'the mind receives impressions only from the brain, or perhaps even from one small part of it'.¹ Any

¹ P. 83, l. 24—p. 89 l. 7. I have already indicated the general method of his solution, but his arguments are both interesting and obscure enough to deserve more detailed attention.

² Descartes does not make clear the bearing of this argument on the problem under discussion. He starts as if he were developing further his reply to the suggestion that the sick man is deceived because his nature is corrupted. He seems to be going to urge: 'Since the dropsical body is not, strictly speaking, corrupted, it will not do to argue that because it is corrupted it cannot be expected to profit by the teaching of nature'. But the beginning of the next paragraph shows that the previous argument has been, if anything, in favour of the contention he is attacking. For he corrects it by reminding us that we are not concerned with the body alone, but with the composite whole of mind and body. The upshot of the discussion about the 'nature' of the body regarded by itself as a machine is simply that so regarded there is no question of either corruption or deceit, and therefore the veracity of God is not called in question. To this he retorts at once in the next paragraph that though the body as a machine cannot properly be called 'corrupted', yet the composite whole of body and mind is really *deceived* in feeling thirsty when drink will harm it. We are therefore back where we were. The sick man, who is as much one of God's creatures as the healthy man, is deceived by nature.

³ P. 86, ll. 16-17.

given affection of the brain causes a fixed corresponding impression in the mind, irrespective of the way in which that physical affection is itself caused. But since the body by its nature as body works mechanically, the same motion of the brain may be produced by different processes. The simplest illustration is that of a cord in tension. The same movement may be produced in one end of it by pulling either from the other end or from any point in the length of the cord. For 'cord' substitute 'nerve', and you have the simple explanation of pain felt by a man 'in his foot' when he has lost his foot by amputation, and also in principle the explanation why a parched condition of the throat, in dropsy and in good health alike, produces a desire for drink. The condition itself has a different cause in the two cases, but it produces the same 'motion' in the brain, and that motion is allied (through the instrumentality of God) with a particular mode of thought—namely the desire for drink. Either the body would have to be more subtle in its workings than the most complex machine, so that for every difference in the origin of a movement in the brain there was a difference in the resulting movement itself, or else the relation between mind and body would have to be such that it could 'receive impressions' not merely from the brain, but directly from any affected part of the body. Thus the nature of man, as composed of mind and body, is essentially imperfect, and so must sometimes be fallacious. Descartes has already, in the *Fourth Meditation*, answered the question why God did not make man perfect. Here he shows that within its limits man's nature is so designed as always to guide him rightly rather than to deceive him. The laws according to which it works being (so far as it is corporeal) rigid and unvariable, cannot guide him rightly in both normal and abnormal conditions. It is plainly in his interest that the deceptions should be exceptional, especially when by study he can learn to correct them. This principle is well illustrated by the case of the man suffering from dropsy. "If it sometimes happens that the parchedness of the throat does not arise, as is usual, from drink's being necessary for the health of the body, but from quite the opposite cause, yet it is much better that it should be deceitful in that instance than if, on the contrary, it were continually fallacious when the body is well disposed."¹

The goodness and veracity of God permit me 'no longer to fear that falsity may be met with in what is daily presented to

¹ P. 89, ll. 2-7.

me by the senses'. Knowing that my senses are on the whole trustworthy 'in matters relating to the advantage of the body', and knowing the cause of their exceptional illusoriness, I am able to avoid possible errors by using different senses to check one another's verdict, and by bringing past knowledge, retained by memory, to the aid of present.¹

M. Gilson deals with Descartes' proof of the existence of the external world in two Chapters—Part II., chap. vi. and Appendices, chap. iv.² Of these the second contains the fuller account, and I shall refer mainly to it. Both accounts (the second more than the first) slur over the part which, if I am right, is played by the 'teaching of nature'. Neither specifically mentions it in the form in which it most often occurs in the *Meditations*, though both contain such phrases as 'forte inclination naturelle à croire' (p. 242; cf. Descartes, A. and T., vol. ix., p. 63) and 'raisonnement spontané et naturel' (p. 304).

It is, I think, the temptation of simplifying that leads M. Gilson to underestimate the importance of the natural impulse to believe. The whole content of the *Meditations*, he maintains, is reducible to a single formula—'an exhaustive explanation of the content of the *Cogito* by the principle of causality.'³ The *Cogito* guarantees the existence of my thought and the ideas that it contains. Apply to these ideas (i.e., to their objective reality) as effects the principle 'that the reality or perfection contained in the effect must be contained either formally or eminently in its cause',⁴ and you can account for (a) the idea

¹ P. 89, ll. 8-20.

² The first account views Descartes' proof from the special angle of the divine veracity, while the second gives a careful analysis of it in order to show how its weaknesses may be made good with the help of Spinoza's reinterpretation. The purpose for which the second analysis, at least, is undertaken demands that no fundamental element in Descartes' proof should fail to receive its due weight; and I think it will be plain to any reader of the chapter that M. Gilson is in fact setting out to give a straightforward and complete analysis of the argument (see especially its introduction on p. 300). I do not think, therefore, that I am open to the charge of criticising him for failing to do satisfactorily something that he has not tried to do at all.

³ P. 300; cf. p. 240, and p. 204, note 1.

⁴ For the sake of convenience I shall refer to this, and to this only, as 'the causal principle'. It should be noted that the principle as used by Descartes applies not only to ideas, but also to material effects. (Cf. *Med. III.*, Vol. VII., p. 40, ll. 21 ff., where he applies the principle to the production of a stone and of heat, and the statement of it in *Reply to Obj. II.*, Axiom 4). But its chief importance in Descartes' metaphysics lies in its application to the objective being of ideas. Cf. (e.g.) below, p. 203, note 3.

of mind, by the existence of a thinking substance, (b) the idea of extended body, also by the existence of a thinking substance, which contains formally more reality than is objectively contained in the idea, and (c) the idea of God, by the existence of God. There remain only those ideas which we call images and sensations of corporeal objects. They too must be explicable by the same method.

Two of the three passages in which this argument occurs might conceivably be taken to mean not that the *existence* of the objects of the ideas is proved by applying to the ideas the principle of causality, but merely that the objective contents of the ideas are adequately accounted for by those objects (after their existence has been independently proved). But in the third M. Gilson explicitly states that the existence of the objects of the ideas is proved by applying the principle of causality. "In fact, Descartes' metaphysic reduces itself to an analysis of the *Cogito*, where we find three ideas—thought, God, extension—and to demonstrating the real existence of their objects by the principle of causality".¹ Besides, the context of the passages strongly implies this interpretation, for their whole point is to suggest that the existence of matter is to be proved causally from its idea, according to a formula consistently followed by Descartes in the *Meditations*. All the instances given are supposed to be applications of the same method, and in the causal argument for God's existence there is no doubt that the movement is from the effect (*i.e.*, the idea), which is given, to the cause, which is not given. This seems to put M. Gilson into the impossible position of maintaining that the existence of the self is proved causally from the idea of the self—a position so absurd that he certainly cannot mean to hold it. There is no question for Descartes of starting from the thinking and proceeding to the 'I' as its cause, for the 'I' has its being only in thinking. The *Cogito* proves directly the existence of the self; it does not merely prove the existence of an idea of the self, from which by a distinct step consisting in the application of the principle of causality the self's existence has still to be proved. M. Gilson must mean (though it makes the passages lose their point) that the existence of the self is independently proved and can then be used to explain its own idea. But his statement is ambiguous (the passage on p. 204, note 1, I find particularly hard to explain away), and the ambiguity seems due to his desire to reduce the *Meditations* to the application of a single formula. This also

¹ P. 204, note 1.

leads him to bring to the examination of the proof of the existence of material things a preconceived idea of how it is to be effected. But if the formula does not work for the proof of the existence of the self, why should it be expected to work for that of matter? If, then, we find that the causal principle is not by itself adequate to prove the existence of the external world, we shall not be admitting an exception to a formula otherwise universally applicable. I suggest, then, that it was the tempting simplicity of this formula that beguiled M. Gilson into underestimating that part of the proof which, though essential, seems at first sight independent of the causal argument, and led him to assign to the causal principle a rôle which without the assistance of the teaching of nature it cannot fulfil. We shall see, further, that though the proof as interpreted by M. Gilson is an argument from effect to cause, it does not really use the 'causal principle', in the form in which Descartes himself says it is used in all his proofs of the external world.¹

The desire to apply his formula explains why on page 242 of his first account M. Gilson holds Descartes' argument that God has given me no faculty whereby I can discover that He is the cause of my ideas of sensible things, to be 'much more decisive' than his argument that we have 'a very strong natural inclination to believe that they come from corporeal objects'.² The presence of a teaching of nature, to which the causal principle does not obviously apply, is for him of less importance than the absence of an idea to which it might have been applied. Yet surely the absence of the power to prove God the cause of these ideas derives its probative value only from the presence of an impulse to believe the contrary. God's veracity would not be impugned by the absence of the one if it were not for the presence of the other.

I am not, of course, denying that the causal principle plays an important part in the proof. It would be hard to do this in the face of Descartes' own explicit statement, quoted by M. Gilson, that on this principle alone rests every opinion he has about the existence of the external world.³ I admit and assert that the proof 'rests on' the causal principle in the sense

¹ See note 3 on this page.

² Cf. *Med.* VI., p. 29, l. 27-p. 80, l. 2.

³ Reply to Obj. II., Vol. VII., p. 135. "Prima etiam notio est, omnem realitatem sive perfectionem, quae tantum est objective in ideis, vel formaliter vel eminenter esse debere in earum causis: et huic soli innixa est omnis opinio, quam de rerum extra mentem nostram positarum existentia unquam habuimus: unde enim suspicati sumus illas existere, nisi ex eo solo quod ipsarum ideae per sensus ad mentem nostram pervenirent?" Quoted by Gilson, p. 301.

that the question is from the start defined in terms of that principle; the causal principle is the starting-point of the proof. I deny, however, that it is adequate to bear the whole weight of the proof; I suggest that M. Gilson's own version is not really based on the 'causal principle' in the form in which Descartes himself says that he uses it, though it is a causal argument; and I claim finally that the teaching of nature (that is, ultimately, of God, the cause of our natures) is an indispensable part of any proof based on the causal principle.

Applied to ideas as effects (*i.e.*, to their objective being), the causal principle asserts that an idea must be caused by something which contains either formally or eminently the reality contained objectively in the idea. Applied to the ideas of material things, it asserts that the causes of these ideas contain their objective perfection either formally (*i.e.*, they are material things) or eminently (*i.e.*, their cause is God or an angel or myself as a thinking thing). The question 'Do material things exist?' thus becomes 'Does the cause of my ideas of material things contain formally or eminently the perfection objectively contained in the ideas?' or 'Is their cause to be found in material things, or God, or an angel, or myself?'¹ Thus the causal principle, applied to the ideas of sensible objects, serves as the starting-point of the proof by defining the question. In this sense the proof may truly be said to be based on the principle; and I maintain that though M. Gilson's version is an argument from idea to cause, it is *not* based on the causal principle so clearly defined by Descartes in the passage which he quotes.

The best way of supporting this and my other remaining contentions is to examine M. Gilson's fullest account, given in Appendices, chap. iv., pages 300 ff. He deals first, most lucidly, with the merely probable proof from imagination. When he comes to sensation his account has three stages. (1) He gives what he takes to be a complete proof² without any mention of a teaching of nature, or a natural impulse to believe; (2) he then adds 'other arguments confirming this proof'³ but these again omit the teaching of nature. (3) Finally he speaks of 'removing the

¹ Descartes' own words, immediately following the statement that the proof rests on the causal principle, imply that the function of the ideas is to raise the question, and that the application to them of the causal principle defines its terms. "Unde enim suspicati sumus illas [sc. res extra mentem positas] existere, nisi ex eo solo quod ipsarum ideae per sensus ad mentem nostram pervenerint?" *Loc. cit.*

² 'Achevons maintenant la preuve . . . ' P. 303, last par. but one.

³ 'On peut ensuite confirmer cette preuve . . . ' P. 303, last par.

difficulties which Descartes himself had raised in the *First Meditation*.¹ Here he does seem to refer to the teaching of nature, but he calls it 'this spontaneous and natural *reasoning*', and speaks of '*concluding* naturally and inevitably from sensation to things'. In fact, he does not seem clearly to distinguish the teaching of nature from that of the natural light (*i.e.*, as involved in a rational argument) of which he has himself just given an analysis.

Let us examine each of these stages a little more closely.

(1) The proof runs thus: "There are in us ideas independent of our own will; therefore our mind is not the cause of their appearance; therefore their appearance depends on the bodies which these ideas represent. Thus it is proved that the external world exists." This is certainly a causal argument, but it makes no use of the causal principle on which (as M. Gilson has shown) Descartes himself tells us the proof must rest. If we base our proof on the causal principle we shall observe at once that M. Gilson's version is quite inadequate. It does not merely leave open difficulties to be settled later: it is no answer to the question raised by the application of the causal principle to our sensible ideas. This question is, given certain ideas, to determine whether their cause contains their objective perfection formally or eminently. Is it to be found in matter or in God, or in an angel, or in myself as a thinking thing? Their independence of our will only rules out our own mind as a possible cause. It does not prove, as M. Gilson maintains it does, that they depend on bodies, nor does Descartes suppose it to prove this. There is still left open the alternative (to be maintained later by Berkeley) that their cause may contain their objective perfection eminently—that it may be 'God, or some other creature, of a rank superior to body.'² And this possibility, if the proof is really based on the causal principle, is not something which may be brought as an objection against an otherwise essentially complete proof, but is from the start envisaged as a possibility which has to be dealt with. Nor can it be dealt with except by the help of the teaching of nature. In fact, the step which M. Gilson calls 'meeting a difficulty' is absolutely cardinal to the whole argument.

(2) The 'confirmatory arguments' are two. (a) 'Sensations are more lively and clear than the ideas which depend on the consent of our thought; therefore it is not from our thought that this liveliness comes to them, and it follows that it comes

¹ 'Reste cependant à écarter les difficultés . . .' P. 304.

² *Med.* VI., p. 79, l. 21.

from existing external bodies'.¹ But why not from God? The conclusion drawn in the *Sixth Meditation* from this superior vivacity is simply that the ideas are not caused by myself. Something more is needed to show their real cause. That something is a teaching of nature based on the content of the ideas. 'As I had no knowledge [of the objects causing them] beyond what the ideas themselves gave me, nothing was so likely to occur to my mind as the supposition that the objects were similar to the ideas which they caused.'² And the passage goes on to explain that this supposition is a teaching of nature following upon the sensation in exactly the same way as the belief that I need food follows on the sensation of hunger.³

(b) 'This same internal experience' teaches me that one of these bodies specially belongs to me. It is not clear from the context to what M. Gilson refers by the phrase 'internal experience'; presumably he means organic sensations, including hunger and thirst. But we have already seen that this belief is a teaching of nature, by means of these sensations.

(3) The 'difficulty to be removed', or the question still remaining to be answered, is why 'this spontaneous and natural reasoning which we all formulate to explain our sensations' is to be trusted when other reasonings about sensible objects are plainly false. The guarantee is the veracity of God. 'This reasoning which we all formulate' from the context can refer to nothing but the argument contained in (1), or in (1) and (2). But do we all argue or need to argue, before we can believe in the existence of our own or external bodies, "My ideas of bodies are independent of my will, therefore they are not caused by me, therefore they are caused by bodies"? If we did, it would be a very bad argument, as we have seen. In fact we do not argue about it at all, any more than we argue to discover that we need drink when we are thirsty. The teaching of nature is not itself a piece of reasoning, though it enters as the most important premise into a rational and conclusive argument to prove the existence of the external world. M. Gilson has doubly misrepresented it. He has confused it with the natural light, and he has described its function as merely that of 'removing a difficulty', when in fact it is the cardinal point in the proof.

M. Gilson has called Descartes himself to witness that his proof involves two things: (a) the causal principle,⁴ (b) the awareness that sensible ideas come from outside, not from ourselves

¹ Pp. 303-304.

³ P. 76, ll. 6-20.

² *Med.* VI., p. 75, ll. 14-23.

⁴ P. 301.

(an awareness based not on the content of the ideas but on the manner of their production).¹ Any satisfactory account must succeed in combining these two factors. At the risk of repetition I shall end by summing up briefly my own view of the Cartesian proof, showing the relation between these two elements and the teaching of nature, to which so much attention is given in the *Sixth Meditation*.

We start from the ideas of sensible objects. The question for the philosopher is—What causes these ideas? Not we ourselves as thinking things, for they are not under the control of our will. Therefore they come from some outside source. Applying the causal principle, we recognise that that source must contain either formally or eminently the perfection contained objectively in the ideas—if it is not 'corporeal nature' it must be 'God or some other creature of a rank superior to body' (VII., p. 29, l. 21). Which is it? Here we could get no further if we did not at once realise that all our lives, before the question was explicitly raised as a philosophical question, we had been taught by the nature which God has given us to believe that these ideas came from corporeal objects.² Examining this teaching, we find that in essence it resists any attempt of the natural light to shake it. Nor have we any clear and distinct conception to the contrary. Our only ground for doubting it would be the possibility of an all-powerful deceiver. But we know that on the contrary God is veracious, and could not have given us a nature which would fundamentally and hopelessly mislead us. This knowledge completes the proof. Our conclusion, then, does not contradict the position that for Descartes all knowledge, including the proof of the existence of bodies, is through clear and distinct principles. The instinctive propensity to believe is an indispensable premise in a causal argument.

¹ P. 303.

² That is not to say that we had argued on each or any occasion from the idea to its cause before forming the belief, still less from the teaching of nature to its cause in God, but simply that upon the occasion of having an idea of a sensible object we had assumed the existence of a material object like the content of the idea. Had we then examined the implications of this belief we should have discovered that what we really believed was that the material object was the cause of the idea.

IV.—DISCUSSION.

FORMALISM.

I.

IN his article on "The Value of Formal Logic" (MIND, January, 1932) Dr. Schiller addresses certain questions to me which I presume are not merely rhetorical but require to be answered. Commenting on my statement¹ that the formal logician can ignore, or make but the minimum of reference to, the fact that people think, Dr. Schiller exclaims, "Will he not, at least, divulge what *is* 'the minimum of reference to the fact that people think' which is permissible in Formal Logic? Does he really believe that if there was *no* thinking there would still be logic? Does he really mean that even though there *is* thinking it is wholly irrelevant? that the psychic conditions of human thinking should have no bearings at all on the aims and methods of Logic?"

With regard to the first question, 'The minimum of reference' is, in my opinion, no reference whatever. If I did not say so baldly in my original article it was merely to avoid an appearance of pedantry. A formal logician in the exposition of his subject may feel moved to express his opinions on some aspect of the process of thought. I have no wish to condemn him for what is technically an irrelevancy; my point is merely that it *is* technically an irrelevancy, a permissible aside which forms no part of the subject of Formal Logic which *ex hypothesi* is in the course of exposition.

Do I really believe that even if there were *no* thinking there would still be logic? I certainly do believe that under such circumstances there would still be *the facts with which Formal Logic is concerned*. Whether there would also be Logic to be concerned with them is quite another question. The term 'Logic' is commonly employed to designate the *study* of a certain class of facts. Clearly in the absence of thinking there would be no study of any facts whatever. There would be no Logic—or for that matter any other science. The fact that there *is* thinking does not affect the situation, though it does provide material for another science, the science which we have agreed to call 'Biologic' or 'Useful Logic'.

My answers to Dr. Schiller's questions should not, I think, offer occasion for any difference of opinion between us, provided we really

¹ *Proceedings of the Aristotelian Society*, Supplementary Vol. X., p. 32.

do agree that there are two logics. But further statements of Dr. Schiller suggest that he is not wholehearted in his recognition of the two subjects. He objects to the separation of Logic from Psychology and to my alleged divorce of the theory of thinking from its practice. But by saying that there are two 'logics' I mean two *separate* logics—that they are other than each other. They really are separate, although I agree that there are interesting and important relations between them. I have particularly emphasised one such relation, *viz.*, that, inasmuch as the sequence of our thoughts is frequently determined by the perception of formal relations, the study of correct thought presupposes an explicit recognition of many of the facts systematised by Formal Logic. Furthermore, my distinction is not between the theory and the practice of thought. Formal Logic is not concerned with either. The other Logic is the theory of the practice of thought.

That Dr. Schiller is not prepared to accept all the implications of the distinction is further suggested by his *caveat* (at the end of his article) to the effect that the disjunction is not strictly exclusive. Curiously, he denies this disjunction by attributing uses to Formal Logic which I, at any rate, have no wish to claim for it. On this point I am prepared to go a full two miles where he would constrain me to go only one. I attach very little importance to the value of Formal Logic as an organon for dialectical debate, and I very much doubt whether it sharpens the wits to any greater extent than most other sciences, properly handled. The chief value I should claim for Formal Logic is that it satisfies a certain manifestation of human curiosity. I question whether it can or need claim any other justification.

II.

On page 62 Dr. Schiller comments upon some remarks of mine concerning logical necessity. I suggested that one fairly clear meaning of 'necessity' was that in which 'q is a logically necessary consequence of p' is equivalent to 'q is entailed by p' or 'q follows from p'. Dr. Schiller writes, "The phrase 'it follows' appears to be fatally ambiguous. As Mr. Mace takes it, in a Formalist way, as describing a 'logical relation', it is plainly a metaphor. It may be nothing more. At any rate what more it is remains a mystery in Mr. Mace's account."

If 'occurring after' or 'moving at a discreet distance behind' be taken as the literal meaning of 'following' the logical use is admittedly metaphorical. But if it is a metaphor it is presumably a metaphor for something.¹ I have no wish that it should be

¹ "Metaphors occur as often as we take a word out of its original sphere and apply it to *new circumstances*." H. W. and F. G. Fowler, *The King's English*, p. 200 (Italics mine). The point is that even when used metaphorically a word applies to something.

anything more. Whatever may be the difficulty in pointing out precisely the relation to which 'follows from' is metaphorically applied, I am tolerably sure that it is not that suggested by Dr. Schiller's simple and more literal interpretation. Let us suppose that I am in the habit of thinking that 'all animals are horses' after thinking that 'all horses are animals'; and let us suppose that I persuade others to a like sequence of thought, the second thought still doesn't 'follow' in the important sense.

Perhaps Dr. Schiller will reply: "But you *don't* think in such sequences, and if you did you would not get others to think in the same way."

And why not? The answer is simple on my view. It is because it doesn't follow in fact, and it is obvious to everyone that it doesn't follow. That is to say, the presence or absence of the logical relation metaphorically expressed by 'follows' (which Dr. Schiller finds difficult to identify) is a very obvious relation. It is so obvious that its perception determines a very large number of uniformities of sequence in thought. This, I suggest, is a simpler view than any offered by Dr. Schiller. On his view, I presume, these uniform sequences belong to the ultimate mysteries of the universe.

Dr. Schiller does not seem to distinguish the account I offered of logical necessity from my suggestions as to the analysis of the way in which the course of thought is determined by the awareness of this and other logical relations. He seems to regard my analysis of this determination as the same thing as the analysis of logical necessity. But from my view as to the 'two logics' it would follow that questions concerning the nature of logical necessity can be discussed without reference to the determination of thought.

Any hesitancy I may feel in asserting that the 'thought of *p* determines the thought of *q*' is equivalent in meaning to 'the belief in *p* and the belief that *p* entails *q* jointly cause the belief in *q*' is not increased by the admitted uncertainties regarding the analysis of the causal relation. We may be tolerably sure of the fact that one thing is the cause of another without being at all sure as to the correct analysis of this fact. This, however, is a secondary point. My chief concern is to point out that, on my view, the causal relation does not enter into, nor throw any light upon, the analysis of logical necessity.

III.

I should like in conclusion to add—if I can do so without raising any new controversial issue—that I hold no brief whatever for Formalism as defined by Dr. Schiller. With regard to much that he says concerning 'meaning' I am entirely on his side of the fence. The conception of Formal Logic which I wish to defend is one that is free from any assumption 'that meaning is inherent in words'. Meaning is inherent in words only in the trivial sense that it is an

essential function of a word to mean—a sense which renders a ‘meaningless word’ like ‘a symbol that doesn’t symbolise’ a contradiction in terms. I do not suppose that Dr. Schiller would deny this. If I understand him correctly one of his chief contentions is that the sense in which a word means is one which is derivative from that in which a *thinker* means. Roughly, to say that ‘A’ means A is an assertion derivative from or equivalent to one of the form “X (some thinker) uses ‘A’ in order to refer to A”. ‘Meaning’ in other words always implicates directly or indirectly a thinker as well as a word or other symbol and its referent.¹ If this be Dr. Schiller’s view then I agree. I do not think, however, that all that Dr. Schiller supposes to follow from this really does so. It does not follow, for example, that we cannot usefully and properly distinguish the ‘correct’ usage of terms from purely personal (and often incorrect) usages. Admittedly, the correct usage will be in some way derived from the usage of particular individuals on particular occasions. The point may be put, for one case at any rate, in terms of the traditional doctrine that general names have a ‘conventional’ as well as a ‘subjective’ intension. We may say that the conventional intension is derivative from certain cases of subjective intension. It is perhaps not easy to show how exactly the conventional intension is derived from the subjective intension, but I have very little doubt that it can be done, and that when done it justifies us in saying that a person is using words incorrectly when he says that a thing is “black” meaning that it is white. If he says “it is black” then he *says* that it is black whatever else he may *mean*. It is in virtue of ‘conventional’ intension that we sometimes say what we don’t mean. If subjective intension and ‘personal’ meanings were all that is to be taken into account we should always say exactly what we mean and nothing else. Perhaps, however, Dr. Schiller doesn’t really mean the contradictory of this, though he does seem to “say” so.

¹ The whole story is of course a very long one. It has taken Mr. Wisdom three articles in *Mind* merely to epitomise it in a very condensed form.

C. A. MACE.

V.—CRITICAL NOTICES.

The Natural and the Supernatural. By JOHN OMAN, Principal of Westminster College, Cambridge. Cambridge, at the University Press, 1931. xiii + 506 pp. 18s. net.

THE appearance of the *magnum opus* of a matured theologian whose previous books, devoted to particular problems, have taken a high place in the literature of their department, is an event of interest and of importance to students of theology. *The Natural and the Supernatural* presents a comprehensive 'philosophy of religion'—as distinct from a philosophical theology—built up during "a somewhat extended life spent in reading and thinking" about the problems connected with religion. As an inquisitive reader, Dr. Oman has of course acquired a great wealth of learning, both in the several departments of theology and in other fields directly and indirectly related to theology. And the independence of his thought is proportionate to his capacity for absorption. He tells us in his preface that the obligation of which he is most conscious is to some of those from whom he most differs; and it is plain that critical weighing of the views of other writers has played some part in the shaping of his own convictions. But it is yet plainer that, on its constructive side, this work is inspired by the experience and outlook of a thinker of pronounced individuality, and is mainly the product of original observation, reflection, and synthesis: the author's chief obligation is to himself.

Dr. Oman's pages abound in shrewd criticism of forthcoming views on various subjects, forcibly and sometimes humorously expressed. But more impressive are the deep thought and insight which are brought to bear on matters relatively unexplored. The weightiness of many of the author's utterances, and of his work as a whole, will be recognised by readers who may not be convinced by his endeavour to show that religious experience contains its own vouch for the reality of 'the supernatural environment': they will find in this volume suggestions and interpretations that will not have been met with elsewhere, and much matter provocative of thought.

The work is not a history of either religion or philosophy, though the history of both is freely introduced. It is not concerned with natural theology, or with the philosopher's approach to theology through theory of knowledge and the sciences, save incidentally

and negatively: one suspects, rightly or wrongly, that Dr. Oman has but little sympathy with such approaches. It is not concerned, again, with an exposition of theism, save as religion: not with theistic doctrine, or indeed with doctrine at all except such as is of purely religious origination and significance. But it presents an argument to the effect that religion, as conceived by the author, is presupposed in natural knowledge and is determinative of the progress of human culture.

As the title of the volume indicates, its central question is the relation between the natural and the supernatural; but this question is so comprehensive as to involve the discussion of many specific issues in psychology, theory of knowledge, ethics, theology, and the sciences of religion and religions. The main problem is subdivided under three heads: the relation of knower, knowing, and the known; freedom and necessity; the evanescent and the eternal. Much of what is expounded in the chapters devoted to these subjects is perhaps not dependent on the answer which, at an early stage, Dr. Oman gives to the initial question, commonly described as that of 'the validity of religion', or the question 'have we knowledge of a supernatural environment?'

This is discussed in Chap. V, entitled 'The Religious Environment'. Taking religious experience to be something *sui generis* yet common to primitive (or pre-moral) and civilised man, Dr. Oman regards it as distinctively characterised, in the first place, by a particular kind of "feeling" [emotion?]. This is a kind of awe differing from fear, moral reverence, etc., and manifesting its difference therefrom by its issue in the second characteristic, *viz.*, religious valuation, or valuation as "sacred". Leaving aside for the present this factor of valuation, and regarding only the emotion of awe, one should observe that this is called "the sense of the holy". Much hangs on the precise meaning of this phrase, for we read (p. 69) that "as the natural world is known by sensation and its various comparative values, so the supernatural world is known by the sense of the holy and its sacred or absolute values". Granting for the moment that feeling and valuation figure as largely as Dr. Oman later represents them as figuring in our 'knowledge about' things, valuation presupposes some awareness of, or acquaintance with, what is valued; so the 'sense of' the holy, correlated in the sentence quoted above with the sensation on which knowledge of the natural world is based, must be or include cognition of that which excites the emotion of religious awe. It would seem, indeed, that 'emotion' is too narrow a term to be equivalent to the author's word 'feeling', for which I have substituted it, and that 'feeling' is a word to which he gives a meaning of his own, including elements such as are wont to be distinguished as instances of cognition, feeling, and valuation. It is the alleged cognitive element in this "feeling" which here calls for description and justification. We only experience ordinary fear when we have perceived some fearsome thing; but religious

awe is experienced without sensory or impressional evidence of its excitant; for this is not any natural object, according to Dr. Oman's teaching, such as those in which men once localised the holy. He rejects the view that the supernatural is known inferentially, as the assigned cause of the awe; and also the view that it is directly apprehended as to its essence or quality by any faculty akin to sense, such as some mystics have invoked: its only 'content' is its capacity to excite emotion and valuation. Yet if the 'sense of' the holy involves immediate, as distinct from interpretative or suppositional, cognition of the invisible and intangible Supernatural, it would seem that there must be in it something so far akin to sensation as to be another instance of that 'absolute positing' which, as Kant taught us, is involved in the existent, as distinct from the ideal essence of which existence is no predicate. "Feeling" then includes direct 'acquaintance' with reality, but of no specific kind hitherto met with in psychology or speculative philosophy, unless it be that of Schleiermacher.

The qualitylessness, if I may so call it, of the 'undifferentiated holy', which renders it capable of entering into a multitude of different mythologies and religions, strongly suggests its kinship with the generic image or the abstract and interpretative idea rather than with the concrete object of quasi-perception. But this view is neither countenanced nor refuted by Dr. Oman. It is not refuted by his criticism (in Chap. III) of various theories of religion as illusion, and indeed does not imply that religion is illusion. In a context (pp. 380 ff.), in which the present issue is perhaps not explicitly in view, good reasons are given for believing religion to be more primitive than such forms of animism and polytheism as involve somewhat advanced notions of the soul, etc. But imagination, analogical interpretation, and so forth, such as are presupposed by knowledge of other selves and by the crude conception of causality, must be as old as humanity; and these seem to be sufficient to start the process of anthropic interpretation of mysterious phenomena in terms of a higher and unseen power or powers.

If the supernatural is the 'holy' in virtue of the peculiar emotion excited by it, it is also 'sacred' in virtue of the valuation which it evokes. Hence, "as here used, the Supernatural means the world which manifests more than natural values, the world which has values which stir the sense of the holy and demand to be esteemed as sacred" (p. 71). Natural values are those associated with pleasure and convenience; sacred values are "absolute"—i.e., not merely more excellent than but incomparable with other goods, and higher than the value of life itself. Dr. Oman says well that mankind knew what sacredness is before they could free it from the natural, and he shows that primitive man's ascribing absolute values to birds and beasts and creeping things, inexplicable as it is for us, need not blind us to the enormous significance of the entrance into human life of such absolute valuation. But it seems a great leap from the

fact that we pass value-judgments such, *e.g.*, as that we ought to choose death rather than treachery, to the alleged fact that such absolute valuations bespeak "another reality" than that which "we know by the senses and judge by our appetites", or "an environment" known by means of such valuations. This alleged truth seems to Dr. Oman to be self-evident: "we know the Supernatural as it reflects itself in the sense of the holy and has for us absolute value directly and without further argument; and the question is not that it exists, but how it exists in its relation to us and our relation to it". Again, on the same page (72), we are told that "awareness of the reality of the Supernatural is not something added to the sense of the holy and the judgment of the sacred by some kind of argument, say from the natural world". Thus if any argumentation seemed necessary to Dr. Oman, the validity of religious belief should for him depend on the cogency of reasoning from sacred or moral values to a supersensible world; but even this he deems superfluous. We may bestow the name 'supernatural', if we choose, on values that are 'absolute' in Dr. Oman's sense of the word, and so draw a distinction between the natural and the supernatural other than such as have been wont to be drawn; but that these validities are a 'real environment', or imply one any more than do the validities of metageometry, so far from being self-evident, seems to presuppose a metaphysic requiring proof or reasonable grounding. It is on this fundamental issue that I find myself most at variance with the author's position.

The next chapter contains an exposition of the author's standpoint with regard to religion (including bad religion), to evolution, and to theology. Here is pointed out the importance of sacred-valuation, despite its primitive application to what seem to us "the insanest of taboos", in emancipating man from subjection to Nature and enabling him to control it to his own ends and to laugh at the blows which it deals to his fortunes, as well as to endure them. Dr. Oman sees in religion the source and nurse of conscience and reason, invention and science; and this because he attributes to religion the origination of the transition from the tied to the free idea, which is certainly exemplified in the development of religion. But is not this transition accounted for, in general, by the frequent issue of 'preperception', or of anticipation, in error and disappointment, evoking distinction between the 'what' and the 'that'? Also intersubjective intercourse and attainment of the common standpoint appear to me to be sufficient to account for the emergence of reason, and, together with the natural humaneness involved in sociality, to account for the origin of conscience. It does not seem necessary to suppose that these human acquisitions presuppose the "absolute" valuations of religion.

In setting forth his method and, later, his theory of knowledge, the author illustrates from the history of rationalism the hopelessness of beginning with the simple and abstract, and building up

knowledge by the understanding alone. We must begin, he maintains, with our total environment as surveyed from the highest standpoint we have reached, involving experience and "insight" as well as the understanding which supplies comprehension and explanation. The ideal of this "awareness", or general sense of all around us, and of "apprehension" by concentration of attention on particular things, is supplied by the poet rather than the scientist. Scientific explanations have their uses; but, if used so that they lead us to see through the eyes of a theory, as they often do, they merely pervert perception. The ideal poet, says Dr. Oman, apprehends with "sincerity of feeling"—which means 'objectively right valuations'—and with a "sensitiveness" enabling him to perceive not merely what is in the physical but also what is beyond it. But no criterion is indicated by which to determine whether or not the ideal poet's 'insight' is but interpretative 'reading-in', as much of the 'insight' of actual poets presumably is. One cardinal feature in the author's theory of knowledge is that our knowledge of Nature is not merely a conceptual elaboration of sense-impacts, but from first to last involves valuation and "sincerity of feeling" if it is to be truth. I think he unduly minimises the functions of sense and understanding, and exaggerates those of feeling and valuation. The illustrations by which he supports his view do not seem to me relevant. For instance, it is said (p. 73), "did we betake ourselves to the same kind of religion as the Indian, we also should live in the [sensible] world as in a vain show, and no kind of physics could . . . make the world appear less of a dream". But what the Indian doubts is the ontal or ultimate reality of the sensible, whereas what should here be in question is its actuality or phenomenal 'reality'—its difference from the imagery of our dreams when asleep—and this the Indian shows, *e.g.*, by eating his food and finding his way through permanent streets, he believes in as we do. Perhaps the tendency to regard feeling and valuation as if they were constituents of cognition rather than as instrumental in prompting to cognitive search is due to Dr. Oman's free use of the ambiguous word 'meaning' in his account of the knowledge-process. "Perception deals with the world just as meaning"; knowing is "knowledge as we so interpret that our meaning is the actual meaning of our environment"; and so on: in such passages one could wish for a clearer indication of what 'meaning' precisely means, and cannot help suspecting sometimes that the several associations of 'meaning' with intellectual interpretativeness, value-carrying, and purposefulness are being confounded. One may concur with the conclusion that the physical world, if it be reducible to vibrations, may be symbolism of the supernatural, having a purpose and bearing values, and being in those senses 'meaningful'; but one can hardly be put in legitimate possession of such a metaphysic by the results of an analysis of sense-knowledge and its direct implications.

Dr. Oman goes on to relate the Beautiful to the 'holy', the Good

to the 'sacred', and the True to the 'supernatural'. All these ideals have a religious quality in being concerned with a worth beyond all merely natural values and commanding unlimited reverence. "Because of this very quality, the relation of religion to them is just to give independence and courage and the sacredness of personal responsibility for seeing what our whole environment really is and, by living in what is highest in it, seeing still further what it promises. Expressed scientifically, it is that reality is its own sole witness and may not call any other into court; expressed religiously, it is "I will hear only what God the Lord will speak" (p. 208). A few pages further on the essential attitude of faith, as contrasted with that of the agnostic, towards mystery, is described thus: "It is that all this mighty frame of the Natural and man as he belongs to it have their deepest significance, not in what they are, but in the promise dimly unveiled in such imperfect ideals of the true, the beautiful and the good as we are able to reach out after. Only in this sense does religion cherish a sense of mystery. Anything else is mere uneasiness in the dark, upon which any rushlight of scientific fact can serve notice to quit."

Impressive passages like these abound in Dr. Oman's book. And to say so is to indicate that a very inadequate idea of its greatness would be conveyed, to anyone who has not read it, by an attempt to summarise the author's thought in my own words. Moreover it is impossible to summarise the later sections, within the compass of a review, because the number of subjects dealt with in them is large, and the interrelations between them are manifold. I will therefore add but few words concerning these sections.

Part III deals with Necessity and Freedom. Though it is invidious to give preference to one among other excellent things, I must say that this section seems to me the most valuable part of the book. Like the preceding problem of the knower and the known, that of necessity and freedom is treated as a case of duality in unity rather than, as it has often been treated, in dualistic fashion. The world is of twofold nature: it is a rigid frame and yet something plastic enough for us to act upon it according to our purposes and in the realisation of our ideals. So, it is argued, its rigidity does not imply determinism but may be interpreted as the necessary condition of our receiving its 'meaning' and imposing 'meaning' upon it. Science and its reign of law are at once the offspring and the instrument of our freedom. The discussion of freedom and necessity embraces evolution as a process of both the natural and the supernatural, conscience and conscientiousness, and other large questions.

Part IV, entitled 'The Evanescent and the Eternal,' is concerned with the quest of religion for the abiding within the flux of becoming, and with the nature of religion as redemption from the natural. It contains a classification of religions, according to their attitudes toward the natural and their conceptions of the supernatural. The development from primitive animism to the Prophetic religion

(in which that taught by Christ is included) is traced, and in such a manner as to bring out that "no religion deals with the Supernatural apart from the sense of the holy and the judgment of the sacred, neither of which is ever exercised altogether apart from the Natural"; while "as a religion advances from awe to reverence and from the material sacred to the ethical, the effect on the conception of the Natural is as evident as the effect on the conception of the Supernatural".

Important matter is contained in some of the ten Appendices.

F. R. TENNANT.

The Social Substance of Religion. By GERALD HEARD. London: G. Allen & Unwin, 1931. Pp. 318. 10s. 6d.

In his first book, *The Ascent of Humanity*, Mr. Heard attempted to interpret various historical phenomena in terms of individualism rising above and conflicting with groupism. His thesis was that man's 'social nature' means more than we think it does; it is not merely that men are sensitive to other men who belong to the same group, not merely that they have formed groups and subsequently got caught up in the social wheels which they have set in motion, but that he was once far more profoundly social than he is now. In fact the order which Mr. Heard suggests is the reverse of that associated with the making of a social contract. According to Mr. Heard humans develop self-consciousness out of a non-individualised state in which an individual hardly distinguishes himself from other individuals who belong to the same group. There is, of course, something more in *The Ascent of Humanity* than this thesis of development in the direction of Individualism, and that is the theory of spiral movement back again in the direction of a new susceptibility to the pull of the group.

There is a fundamental difficulty in these behaviouristic inferences. We cannot know what goes on in the minds of primitive peoples as we know them, and we cannot know what went on in the minds of our ancestors. We watch their behaviour and interpret it in terms of some scheme or other which gives us a coherent and consistent story. It is the fashion to begin books on general psychology with an account of the reactions of infusoria and other minute and simple organisms, because we can thereby give a clear picture of a biological scheme of self-preservation in an environment. We point out how the creatures are sensitive to elements in their neighbourhood and make reactions to or from them. Just so, we say, does man respond to his environment with sentience and movements of attraction and repulsion. When, however, we come to man, we drift insensibly backwards and forwards from psychological

formulations to biological and physiological formulations. We sometimes seem to forget that the seeing of an object is one thing and the physiological response to light stimulation is another, and that conation is a different order of concept from cognition and affect.

When we are treating social behaviour we are immediately provided with an ambiguous verb—'to be conscious of'—which derives its ambiguity from the two-fold attitude towards behaviour of which I have been speaking. 'I am conscious of my fellow men' may mean 'I am aware of the existence of other people', or 'I am moved to compassion or detestation of other people'. When I say 'I become more conscious of other people as I grow older', the point is clearer still. As a matter of fact we usually mean that we become more sensitive to the distresses of others and that our behaviour indicates a kindlier disposition, or at any rate that our actions are determined by other people to a greater extent than before; but our language makes us think that we are talking about a change in the way *in which* we are conscious rather than a change in the sorts of things *of which* we are conscious.

This ambiguity makes it very difficult to be clear in our minds about what we are asserting with regard to primitive man when we say that he is conscious of his fellows in a different way from the way in which we are conscious of the people about us. It is quite clear that his behaviour is determined in a way which we can render more understandable by referring it to the needs of the group to which he belongs. His behaviour seems influenced by the instincts of consolidation and self-preservation of the group, considered as the 'owner' of the instincts, and he is highly sensitive to stimuli proceeding from his group companions. But what about his mind? Is the content different, and the mode of awareness the same? Or are both different? It is often assumed that he is conscious in a different way from the way in which we are conscious. This may be true, but I suspect that it is too easily assumed, and I am not clear as to what is meant by a different way of being conscious.

Mr. Heard's language on this point will be seen to be obscure in the extreme. He has introduced those sad words 'subjective' and 'objective'. When man becomes individualised his mind is split into a subjective part and an objective part, self-consciousness is associated with the objective part, and happiness can only be restored if we learn to eliminate "the threshold between the objective and subjective minds". As far as can be made out what he calls the 'objective mind' is what we usually think of as consciousness, and the subjective mind is the 'unconscious'; but we shall find that there is a kind of subjective awareness historically beyond the split.

Let us for a moment put aside the question of consciousness, and consider Mr. Heard's theory as a behaviouristic scheme which helps us to interpret the social relations of human beings. There are now two problems to consider. Under what conditions has this

self-regarding, self-interested behaviour come about, and what has happened to the social side of our natures which self-seeking does not satisfy? 'The Social Basis of Religion' is an attempt to answer these two questions.

The former is dealt with in Part I, but in order to understand what Mr. Heard says one must appreciate his general attitude towards civilisation. In company with many other modern writers he thinks there is something wrong, and his book is not merely a scientific enquiry but it is meant to be of practical value as well. He takes the familiar view that man's environment, particularly his institutional environment, is a projection of his nature. Things are what they are because man is what he is, therefore if things are wrong there must be something wrong with man. "The achievement and tragedy of civilisation . . . are due to a fissure and specialisation in consciousness," he says on page 30. In his earlier book he put our troubles down to individualism and in Part I of this book he asks how individualisation came about. Dr. Freud traces our troubles back to a primal Œdipus situation in which the male children actually killed the father; and according to him the brand of patricide tortures the souls of all who come after. In a more recent work Freud has also suggested that there is another cause of distress—the 'Aggressions-trieb'; so that when Mr. Heard implies that Freud's theory is a sexual one through and through he is forgetting the other component of 'Das Unbehagen in der Kultur'. In any case Dr. Malinowski in his *Sex and Repression in Savage Society* shows that there are matrilineal societies which are free from Œdipus troubles altogether. We must therefore, says Mr. Heard, look beyond patriarchal œdipoid society to an earlier regime. He suggests that at the very beginning the stage is set for an internal conflict. There are two pulls, the pull of the family and the pull of the group, and the group is co-eval with the family and does not develop out of it.

"Below the patriarchal society," he writes, "we should therefore expect to find as the next step away from complete individuality, the matriarchy, a social system with lower conflict-pressure, therefore less sense of individuality and lower energy discharge. . . . Lowest must lie a state of unselfconsciousness and a completely diffused authority through a direct unreflective sense of the community. This state is so firm, lacks so completely the critical selfconsciousness which is individuality, that it is only possible to suppose that it broke up into the more differentiated forms . . . through the tension created by two competing social patterns in the same field of constituents" (p. 39).

From this quotation we can see that Mr. Heard's use of the word 'selfconsciousness' is a little difficult to understand. Is he referring to a mode of awareness, or to a mode of behaviour? Are the members of the group at the lowest stage conscious of trees, paths and other humans, but not conscious of being conscious of them? Or does

he simply mean that their behaviour is determined wholly by the needs of the groups and not by the needs of the individuals as such? Are there any grounds for identifying self-consciousness with self-interestedness? I should have thought that they might be conscious of a feeling such as might be expressed in the words 'I must go and fight', conscious, that is to say, that the feeling is in themselves and not in anyone else, without perhaps reflecting very much about it, and still one could say that their behaviour was dominated by the requirements of the tribe. We are up against the old danger of confusing phenomenology with ætiology.

Let us go on with Mr. Heard's thesis. He says that the pull of the family and the pull of the group, both co-eval in their influence on man's behaviour, lead first to the extension to the group of the most significant feature of the family, to a kind of compromise. This is the meaning of matriarchy, the most primitive form of organised group. But something has happened which has started a development. The family and the group sometimes pull different ways and individuality is the result. The matriarchate is strong, satisfying and stable, but individualism, a state in which (i) my actions are to be interpreted as due to a certain amount of self-seeking, and (ii) I think of myself as being distinct from my fellow group-constituents, and having rights as valid as theirs, has set in. This development continues on its own and leads to the patriarchate, "a reorganisation of society on a more flexible, mobile, adventurous and violent model" (p. 35). The father ousts the mother, but the new compromise still bears the mark of the family—the king is the father of his people.

But a part of man is not satisfied. The groups grow too large, the preparedness to respond is there but the pull is too slight, the bonds too tenuous. The growth of individualism has led to a situation inside us which makes us incapable of satisfactory projection. After all, the environment plays its part in providing most of the material on to which we 'project' our organisations and institutions, and if we are to live in harmony with our environment it must be that what is outside us harmonises with what is inside. If we have a social nature which demands satisfaction, and if sheer procreation and individual dominance increase the numbers and hold them together, then it is possible that however we may 'project' our social natures in the form of concepts like 'the clan', 'the tribe' or 'the nation', the referents of such words will be too scattered and multitudinous to satisfy us. We must seek some other way out.

In Part II this other way out is investigated.

In *Les Formes élémentaires de la Vie Religieuse* Prof. Durkheim has suggested that the ceremony is the centre of religion, and that theology is the linguistic by means of which we rationalise the satisfactions which we experience at the community services, whether we eat the totem animal in the flesh or in the wafer; and Mr. Heard

points out that these rationalisations are individualistic in tone. For Mr. Heard the eating at the religious ceremony has not the meaning that it has for Freud or Frazer. It is not the symbolic eating of a slaughtered father, which combines father-hatred with a primitive means of satisfying it, nor is it a magic identification by absorption: it is derived from the satisfaction of hunger pure and simple, though later on it gains a significance which is neither pure nor simple. The earliest ceremonies are the meetings of the group for the satisfaction of their need for food. "When one member was striving to attain food . . . sympathetic urgency was expressed by all the others who looked on" (p. 84).

Here we have the birth of ritual, while the wails of the lonely chimpanzee longing to re-merge himself in the group are the first utterances of prayer. And the passions and delights of primate communion developed into the joys of the proto-human circle as they "thrilled, gesticulated, grunted and hopped, while the leaders effected some common purpose" (p. 89).

But these meetings, occurring as they did in the practical life of the herd, had another incidental value. They satisfied the social nature of its members because of the closeness of intercourse and unity of aim. And long after, the descendants of *thea pes* meet, not now to satisfy their hunger, though that mark of their original crowding is still there, but rather to emphasise their groupness. The practice becomes less and less practical and rationalisation quiets the reason with magic explanations of the rites; they make the crops grow and the game plentiful. Here we have the double nature of man, passionate and rational; the real value is emotional, but a reason must be given.

The theology and mythology that accrete round these meetings, God the Father, the heavenly Mother, and the Slain Son, are all reflections of internal conditions. The family linguistic still echoes the primitive family interests; the mother still finds a place among the inhabitants of Heaven, and patriarchy still supplies a theological terminology. The loneliness of the sinner, his desire for oneness with God, his horror, at the same time, of losing his identity in death, are all of them symptoms of the conflict within between his social nature and his individualism.

I believe this to be along the right lines. At our stage of psychological knowledge we realise the unimportance of theological reasoning as a determinant of belief. We have grown out of the superficial stage at which we dismiss religion because it is silly; and we realise that the sillier it is, the more interesting, because it must satisfy some curious demand of human nature more fundamental than the search for truth.

Now one of the most striking features of religion is the sexual component, and Mr. Heard has to deal with it. He is prepared to admit that once patriarchy is established, and a patriarchic formulation current in theology, we shall find the sexual complications of

mankind modifying the situation, but according to him "sex in religion is secondary to food" (p. 106). To begin with, he says that we should not expect sex to be the repressed energy from which the forces of religion are derived, because in primitive communities and among the higher apes sex is a trivial matter. In any case, if religion is a group matter, food-getting is a more social performance than copulation, which "can only be a question of exclusive coupling". On page 133 he seems to contradict this view when he writes that "in a way that eating cannot be, sex is the function in which every constituent, however keenly he may feel enjoyment, is made part of the race". The contradiction may possibly be resolved if we interpret the lonely sexuality as that kind which knows what it is about, while the social sexuality doesn't because it is a purely biological group concern. But is this really the case?

How, then, did sex creep into religion at all? "Increase self-consciousness, intensify individuality, and sex is not banished: there is only caused a concentration on its culminating moment. In the cycle of reproduction the reproductive act becomes the whole interest of man" (p. 133). There is, then, a very exciting experience, and it cannot be kept out; it colours whatever is of interest to man, simply because he is so occupied with it. And, moreover, "when sex becomes self-conscious it is bound to become sanctified" (p. 112).

Besides this way in which sex comes into the religious field, because of its importance, there is another way: the very obvious factor of fecundity. "The idea of the mother is the bridge from food to procreationalism" (p. 122), and when the tribe weakened, and morality was loosened, "fertility religion became more specifically erotic" (p. 127).

But whence 'morality'? "We must presume . . . that as the first stage of the personalising of the group's moral sense, the matriarchy and the mother worship, arose, the incessant effervescence of sex would be suppressed and denied its simmering discharge" (p. 113). But why? Surely this points to some kind of incest ban, or some other basis of repression which calls for explanation.

As individualisation grows apace and anthropomorphism sets in with its personalised gods, these individualisations of man's group-yearning only serve to madden him, because they are the mirrorings of his individuality which cannot satisfy his social nature; they are, as it were, usurpers. The energy comes from unsatisfied herdism, but the creations are in individualistic shape. There seems to be here an interesting modification of the usual line of argument concerning symptomatic projections. The symptom is usually supposed to 'drain off' repressed energy by virtue of its hidden meaning, while its manifest and rationalised meaning satisfies the repressing forces, but is irrelevant to the repressed ones. Here, however, the manifest content of the symptom, and especially its individualistic quality, seems to be a bar to the finding of satisfaction through the

hidden meaning. That is to say, though God may stand for the group, the fact that he is disguised as a personal being makes it harder for the repressed social desires to find satisfaction in His 'real' nature. The projection has reacted on to the repressed forces which caused it. According to psycho-analytic theory the symptom does not provide complete satisfaction (1) because what satisfaction it *does* provide is merely symbolic instead of being direct, and (2) because the patient feels guilty in having any satisfaction whatever, however meagre, and not because of the overt nature of the symptom at all, because the Unconscious is clever enough to make anything stand for anything when it comes to double meanings. I doubt whether there is any independent evidence for Mr. Heard's kind of projection, a symptom which is such that repressed desires cannot read its 'true' meaning and find a faint satisfaction in it.

We come now to the split in religious development. On the one hand we have the ascetic rejecting life "because of the antagonism he as an individual feels between himself and the life-force", and on the other the erotic trying "to drown his sense of self . . . in repeated plunges into the most violent vortex of the race stream", and we are also told (p. 166) that "eroticism generally reacts into asceticism" and even that "the ascetic is inevitable if the individual is left unsolved" (p. 190).

We have already seen that sex starts at a disadvantage because of an unexplained restriction under matriarchy, but there seems to be a further reason. Sex gets a bad name because it is focussed on to physical pleasure, and for some reason or other Mr. Heard seems to think that that is bound to lead to a reaction. The practices of erotics "because they are the expression of increasing individuality, and that causes the emphasis to be placed on individual physical sensation, cannot give general psychic relief" (p. 149).

Procreation is safe, the animals procreate with impunity, and may even enjoy it, but when the pleasure of procreation is focussed on to the pleasure of the procreative act, then its pleasure will turn to pain, and dreariness. This is a very dubious argument indeed. Usually the sheer physical energies of the body control desire in that direction, and there are enormous numbers of people who indulge in sexual pleasure without remorse. Surely where there is remorse and disapproval it must be because sexual pleasures are connected with some hidden and forbidden desire, and symbolise it to the minds of those who have strong feelings against them. That type of explanation seems the only possible one where disapproval obviously goes beyond reason. Freud, of course, has his Oedipus theory, which is at least more plausible than Mr. Heard's; though if it is true that there is repression in matriarchates which is of a non-Oedipus nature, we must look in such cases for some other cause.

The problem of the rise of asceticism presents enormous difficulties. Mr. Heard's general line is that the individual "takes against" life

simply because he does not realise that it is due to his own peculiar construction that life does not satisfy him. But surely this is a case for indifference, lack of interest, but not for passionate disapproval. There are pleasures which one does not seek because they do not satisfy any part of one's make-up, but one does not necessarily persecute those who indulge in them. Asceticism is a more violent, positive, bitter attitude than boredom, and there must be some imaginary or real punishment which ascetics fear, to make them turn on temptation as they do.

But, in spite of "fatal fissiparity", there have been brief moments when man has been blessed with some rare kind of joy and satisfaction, or rather when a few gathered together have experienced a thrill which is denied to the majority of mankind to-day. In the early years of the Christian era meetings, love feasts, were held; and these meetings, large enough to submerge the individual, and small enough to have the necessary pull over him, provided a milieu where he could get 'recharged' with energy because it satisfied that group-desire which ordinary society, economically and not psycho-socially built, fails to appease.

Metaphor is necessarily the language of psychology because we must apply a spatial linguistic to a non-spatial field, but it is dangerous. What exactly is meant by this 'recharging' is obscure. It seems a way of saying that the members of the early communities found a joy in their *agapes* which was due to the relaxation of the tension between their individualised and their suppressed social natures.

This lasted but a short time. The groups grew too big, organisation stepped in, Paul wrote the Epistles and asceticism surged back, forbidding all but the most spiritual and sublimated love, and the whole point of the gatherings was misunderstood.

If only we could group ourselves into such communities now, we should find in the beloved community "a path that widens infinitely to the reunion of all life and the whole universe" (p. 210). But how is this to come about? We must remember that the question of number is a vital one, and, more important than that, we must pay attention to Mr. Heard's attitude to reason. Reason is essentially an individualistic performance, and if reason tells us that a certain course of action is what we need, we must immediately be on our guard. What matters is a change of heart and not a change of head. If our social natures burst through, or if, as Mr. Heard hinted in his other book, the individual side of our natures grows less predominant, then no doubt we may begin to coagulate into groups like the early Christians, but no decision on the matter will cut any ice at all, unless it is backed up with the requisite internal constitution.

Most of us would admit that 'self-less' people are often happier than selfish ones, that people who harp on the question 'what do I get out of it?' are often unhappy, and that it would be very nice if people were less self-seeking than they are; but not all of us

welcome Mr. Heard's suggestion that we should seek the submergence of our individuality, whether for an hour or for life, even supposing we had much say in the matter.

To sum up; Mr. Heard has called our attention to a very important aspect of man's constitution—his social nature, and he has shown that that side of him has played a very large part in the development of religious practices. There are, however, two unsatisfactory features in the book; his treatment of consciousness, which I do not feel he need have discussed at all, and his treatment of the connection between sex and religion. We shall not have a satisfactory psychology of religion until we have a satisfactory account of asceticism, and this Mr. Heard has certainly not given us.

This is another of those useful books written by a man full of ideas and suggestions, who, as it were, cannot see the trees for the wood. It is like a picture painted from the air from a peculiar angle; we may say that the detail is wrong, and certain relations unlike reality, but more often than not, as in this case, we are enormously helped by a connected view of so large a tract of country at once. Mr. Heard's powers of grouping and packing his great historical knowledge are well known. The chapters on the development of Judaism, Greek and Roman religion, and the rise of Christianity are brilliant. Many people will find his language difficult: he writes in a complicated parenthetical style, but when he is making unusual connections and unexpected interpretations the compactness of the actual writing may be a positive advantage, and I recommend all who are interested in the psychology of religion to make the effort to overcome the initial feeling of unfamiliarity.

W. J. H. SPOTT.

Ideas: General Introduction to Pure Phenomenology. By EDMUND HUSSERL. Translated by W. R. BOYCE GIBSON, M.A., D.Sc. Oxon. George Allen & Unwin, Ltd., 1931. Pp. 465. 16s. net.

BRITISH and American interest in German Phenomenological philosophy will receive a fillip from the present volume. Husserl's *Ideen zu einer reinen Phänomenologie und phänomenologischen Philosophie* was first published in 1913, and received a penetrating and appreciative review in *MIND*, 1914, page 587 *et seq.* from the pen of the late Bernard Bosanquet. Set forth as the first half of a general introduction to Phenomenology, its appearance in the first number of a *Jahrbuch für phänomenologische Forschung* marked the official birthday of a school.

The interest of the present translation is increased by the contingencies of the book's history. It was never succeeded by any supplementary volume such as its author intended. Husserl's

disciples were involved in the political crisis of 1914, and Husserl himself was driven to look for the spread of his influence rather to the quality of his own thought than to the nourishment of a school. That after the war his seminar was overcrowded and quickly no German university uninfluenced by his views was proof of the fruitful character of his research. But until 1928 Husserl made no further publication. In that year the ninth volume of the *Jahrbuch* brought to light the *Vorlesungen zur Phänomenologie des inneren Zeitbewusstseins* under the editorship of Martin Heidegger, and in the following year Husserl himself published *Formale und transzendente Logik, Versuch einer Kritik der Logischen Vernunft*.

Now in 1931 comes a Preface to *Ideas* written for the English edition. It is interesting that the fifteen years of intensive work which separate the original publication of the *Ideen* from its translation into English have not modified the author's estimate of its importance. He admits it to be still the best introduction to Phenomenology of which he is capable. It represents Husserl's arrival at the phenomenological starting-point to which the *Logische Untersuchungen* (2 vols., 1900-01, Husserl's first book, except for the *Philosophie der Arithmetik*, 1891) only pointed the way. From 1900-13 much modification and essential change of standpoint; from 1913 much development but no essential change! The importance that Husserl attaches to the general confirmation of the phenomenological position to which the Preface subscribes is shown by its appearance in only slightly altered form as "Nachwort zu meiner Ideen, etc." in the last volume (vol. xi.) of the *Jahrbuch*.

It presents a constancy to former principles in preference to accepting some new and, to a certain extent, alternative developments which have been contributed to the school's organ by other hands in recent years.

"Under the title of pure transcendental phenomenology"—so runs the author's preface—"the work here presented seeks to found a new science . . . a science covering a new field of experience exclusively its own, that of Transcendental Subjectivity." *Ideas* is largely an attempt to reveal the nature of transcendental subjectivity, that new field of experience, by engendering a special attitude of mind which, Husserl believes, leads necessarily to its intuition.

The book is divided into four sections. The first, much condensed, is occupied with the clearing away of certain prejudices which Husserl associates with a misapprehension of the limits of science and philosophy. These prejudices form a barrier to the phenomenological approach to philosophy. They are for the most part empirical and centre round beliefs in the universality of natural reality. The second section covers the outline of a mental discipline which operating on an attitude now cleared of *parti pris* induces, through a series of levels reached by "reductions" of the content of consciousness, a state of mind where the attention is directed no longer

to "transcendent" objects, *i.e.*, objects foreign to the nature of consciousness, but to "immanent" objects, *i.e.*, the actualities of which consciousness itself consists. These immanent objects, whose revelation is first effected by the reductive discipline, are the Phenomena which give their name to Husserl's philosophy. They are the "processes", the experiencing "acts", the living in or through which constitutes the subject's consciousness. This is essentially other than the objects of which the subject is ordinarily aware.

The third section holds its universe of discourse on the subjective plane reached in the second section. It is concerned from first to last with phenomena and with the method of dealing with them which it explains and justifies. It is explained as being a method of pure description which aims at depicting the acts and processes which the reflective glance uncovers, and, in the first instance at any rate, it is said to make no use of deduction and to use no more terms than are necessary to fix the characteristics of the processes in question. It is justified by illustration, the author contributing a few introductory descriptions of typical phenomena and appealing directly at each step to the reader's own intuitive reflective glance which is now presupposed.

The fourth section is in the nature of a postscript or important addition: so, at least, it reads. It amplifies the general significance of the phenomenological position by dealing at some length with the place of reason in human experience. Its critical passages are directed against rationalist, much as those of the first section were directed against empirical, misconceptions. It attacks, as Kant did from a very different angle, the persuasion of the limitless power of reason which the successful employment of reason in fruitful quarters is so apt to engender. It explains the meaning of "the idea of a systematic and universal doctrine of the forms of meaning" in a sense which limits its application in the last resort to the concrete data which the various employment of intuition can reveal and which the reason busies itself in formalizing, and its origin to the limiting nature of the phenomena of the subjective "pure" experience whose "thus and thus only!" ultimately conditions the types of object-giving consciousness on the one hand and formalized knowledge on the other. "The Eidos True-Being"—Husserl writes—"is correlatively equivalent to the Eidos Adequately-given-being and Being that can be posited as self-evident." Thus every possible reason is in fact a *raison d'être*, and the last possible reason a *raison d'être* among the self-evidences of phenomena.

In the opening sentence of the Introduction Husserl writes of the "unique position" of phenomenology "in regard to all other sciences". The whole book is conceived in the belief that the *a priori* which phenomenology offers to scientific thought, whether this be what we ordinarily call scientific or philosophical, can only be reached after a kind of opening of the eyes of the blind through the special reductive discipline which he describes. There are

times when he writes with the missionary zeal of one who has returned to the cave to persuade his former fellows to the sun. He sees the field of phenomena as a province of actuality open to the trained vision but for ever closed to every other search and essentially unattainable through any line of speculative thought. He speaks of those "who set aside the phenomenological reduction as a philosophically irrelevant eccentricity" as destroying "the whole meaning . . . of my phenomenology". This is bound to arouse a certain hostility or suspicion among those who have already reached the basis of a philosophical system of their own. It is obviously beyond the task of a reviewer to undertake an apology for Husserl's claims. That after all is the business of *Ideas* itself. For this book sets out to provide for any reader who is willing to suspend his philosophical judgment and to work through the régime of the phenomenological discipline actual proof of his contentions in the shape of *choses vues*, immanent conditioning experience-processes, seen to be as he describes them under the intuition of the new-engendered state of mind. To approach *Ideas* fairly the reader must regard it as a system complete with its own defence, and be resolved to see the trial conducted from within.

Meanwhile there are certain implications in Husserl's exposition of phenomenology which the limits of an already long and difficult book prevent from getting the simplification they deserve. It is to be regretted that the translator should have suggested to his readers (*vide* Translator's Preface) the advisability of postponing the reading of Husserl's first chapter. This does offer, owing to its compression, a difficult surface, but it contains the gist of the book and much more than "a link of connection with the later Logical Studies". It contains the author's conception of scientific method and of the bias of the natural-scientific as contrasted with the philosophic interest. It leads him to a precise and most significant delimitation of natural enquiry. Natural science is not robbed of the compass of all natural reality, but it is kept from laying hands on an independent realm of reality other than natural. By this contrast of actualities Husserl avoids from the outset any speculative scepticism. He will justify the internal validity of natural science whose findings are not going to be upset by any partial subjectivism, but he will also show the need in which the whole body of natural knowledge stands for an *a priori* foundation outside itself. And since this *a priori* is to be altogether independent it cannot be squeezed out of any miscalled 'pure' use of ideas belonging to natural science's abstract disciplines, of ideas such as causality, space-time, *ἀρχή*, wrung from their reference and tortured into being 'metaphysical'. This *a priori* must be served by new ideas; and these ideas will be those that have been found to fix the characteristics of the other-than-natural, that is, the phenomenological, reality. This is all compatible with Husserl's praise of scientific method in general. He will use no other in philosophy. Use of it in the

observation of nature has led to the establishment of science, and its use in the observation of "phenomena" is going to lead to the establishment of the sufficient *a priori*.

But its distinctive use will depend upon the alternative character of the observation. The internal validity of the phenomenological field will depend upon its separateness from the field of nature.

It is a question of Which way the attention? It is impossible to look simultaneously both at the one and the other. Husserl has to show that the whole of natural science has been developed from within the natural attitude, and that yet, while granting that within this natural science may never reach the end, there is another field of reality open to another attitude only, and beyond even infinite nature's *ne plus ultra*.

Preoccupied with the practical difficulty of maintaining life, men's attention is ordinarily concentrated upon the empirical world. He is first interested in facts. Although it is within this interest that natural science is confined Husserl speaks of it as "naïf". We are naïvely interested when we attend to the transcendent, that is to that which transcends consciousness: and not only 'things' but the ideas which ultimately refer to 'things' are transcendent and belong to naïveté. But it often happens that this naïveté is prejudiced, unaware of its *sens unique* and convinced that its relevance is universal. Under this prejudice attempts are made, which Husserl is convinced involve hypostasis, to cover both terms of the knowing relation, the percipient and the perceived, the knower and the known, with one all-inclusive regard. This regard may be either empirically or idealistically oriented. Against both sets of attempts Husserl is resolved to defend his own opposite conviction. He believes that the immanent in consciousness is generically different from all the transcendencies which consciousness can know (except the transcendency of the immanent, *i.e.*, the immanent completely depersonalised and made perfectly general, the transcendency which rather misleadingly in this connection leads Husserl to call phenomenology transcendental) and intuitable only to a disciplined reflective, and no longer naïf, view.

It is often considered that the concepts used to explain the working of physical nature have an ideal significance of their own which can provide the philosopher with *a priori* criteria in the form of a significance, believed to be intrinsic and absolute, which reveals the essence of all being. This is a conception of eidetic which has been used sometimes positively to support and sometimes sceptically to question the particular findings both of the scientist and of the ordinary man. Husserl of course dislikes both uses equally. Neither scientific law nor ordinary perceptive intelligence can be properly either revised or supported from this sort of metaphysical basis. He works to dissuade such seekers after truth by pointing out the essential reference of all abstract ideas except the phenomenological downwards to the transcendency of nature from which they were

in the first place abstracted. His account of the abstraction process itself is very enlightening. It is brought forward to justify his opinion that even the highest generalities of the abstractest natural-science disciplines lie within the naïf interest and must accept its reference. Shortly, abstraction is a kind of formalising which consists in taking the particular as an example of characteristics which do not include its particularity. These characteristics, as the formalising is continued, become increasingly few in number, loss in particularity being set off by gain in generality until the *summum genus* is reached. Through the whole process the meaning of the ideas corresponds to their content and follows an arrow-line of reference downwards to the lowest concrete empirical facta. This does not exclude the practical self-sufficiency of each level between the top and bottom on many of which relatively independent disciplines have been founded. But the clue to the significance of the ideas themselves lies in their content and this takes you back through a perfect continuity of reference to the empirical facta which, ultimately, they were abstracted to explain. Follow me, says natural science, in but the particular use of any sense, and I can force you to take all the steps with me even to the high places where I am called pure and unapplied. But, without hypostasis, the abstract ideas of natural science can no more than the particulars of empirical reality be taken beyond that as which they present themselves. And neither the particulars of empirical reality nor the abstract ideas taken as they present themselves include the 'existence' of ideas. This, surely, is a remarkably sane re-statement and solution of the problem which worried Locke. Abstract ideas on any level, even at the top, even on the level of the dreamed of *mathesis universalis*, cannot supply a *ratio essendi* to anything beyond their own content. There and there only lies their significance. Their own possibility is beyond their range, for what the content of the abstract ideas never includes is the possibility of the abstraction process itself. But this is precisely what the philosopher has to find, and this is what Husserl says he never will find until he forsake the naïf attitude and interest in the natural real. If the philosopher's interest remains an interest in the transcendent world no matter on what plane, he must call himself a natural philosopher, embrace the natural limit and work within it. There are no short cuts to knowledge of the natural world. On the other hand recognition of the need of natural knowledge for an *a priori* has too often been supposed to rest on the dependence of empirical facta upon our experience, as if our possession of abstract ideas of objects implied that we ought to regard them as a substratum to the objects themselves. But while it is perfectly true that our apprehension of abstract ideas does testify to a ground which both they and perceived objects have in common, a subjective ground, namely, the ground of experience-processes in the course of which and as a result of which we make ourselves aware both of the one and of the other,

yet the relation of dependence of which this entitles us to speak is not one between the objects of perception and our ideas of those objects but between perception itself and the knowledge which grows out of it and belongs to it. The reason for our ability to abstract ideas whose content is applicable to empirical reality rests on an actual, although wholly subjective, relation of experiences. Husserl's account of exemplification in which we regard a particular as an instance of a generality beyond itself is really a description of imaginative as contrasted with perceptive experience. In abstracting we are imagining, that is, we are repeating a former experience, perceptive, in a different mode, imaginative. The similarity of the two experiences shows itself in the presentation of an object recognised as the same, and their difference shows itself in the different modalities, then as perceived object and now as imagined object, in which the object is presented. The similarity of the content of perception with the content of conception belongs ultimately to the similarity of the subjective processes involved, *i.e.*, lived through in the experiences. It is because we can repeat in differing modes objectifying experiences kindred in structure that we can conceive, imagine, remember, long for, etc., objects which we have once perceived; and it is in terms of structure of experience that we have to account for the original perception, 'first' only in empirical time, and essentially not in terms of the object itself which we perceive. All attempts to solve epistemological problems in terms of transcendent objects, whether these are natural objects, among which must be reckoned the "real experiences" observed by the empirical psychologist, (Husserl devotes himself at length to the case of empirical psychology and its relation to phenomenology, in which matter certain footnotes to the present edition show him to have been misunderstood in Germany no less than in England and America), or whether they are abstract ideas, involve hypostasis and neglect the essential empirical reference of the objects in question. Again and again Husserl insists on the character of the choice. It is open to us to attend either to phenomena, the "acts" through which we live in making ourselves conscious of objects, or to the objects which transcend these acts, ideas, namely, or particular 'things'. Phenomena, whose description is a description of the conditions of knowledge and perception alike, are not open to the natural attitude. We have a distinction here between natural reality and the actualities of experience, not real in the natural sense but none the less real for all that, which the German fixes nicely, where the words fail us, in the difference between *Realität* and *Wirklichkeit*. The subjective reality of experience requires the special intuition which is to be put at our disposal through a practice of the reductive discipline already mentioned.

No part of Husserl's methodical introduction to the phenomenological standpoint is more deserving of notice than the passages in which he anticipates empirical objections to his claim for the

separate reality of consciousness. They are so boldly phrased that at moments they seem to be going to involve the author in a Cartesian dualism, a suspicion which other passages and indeed the whole drift of the book quickly dispel. I venture to give some fairly full quotations. "All the essential characteristics of experience and consciousness which we have reached"—Husserl writes in the Second Section in his chapter on 'Consciousness and Natural Reality'—"are for us necessary steps towards the attainment of the end which is increasingly drawing us on, the discovery, namely, of the essence of that 'pure' consciousness which is to fix the limits of the phenomenological field. . . . Individual consciousness is interwoven with the natural world in a twofold way: it is some man's consciousness, or that of some man or beast, and in a large number of its particularisations it is a consciousness of this world. In respect now of this intimate attachment with the real world what is meant by saying that consciousness has an essence 'of its own'? that with other consciousness it constitutes a self-contained connection determined purely through this its own essence, the connection namely of the stream of consciousness?"

"Moreover since we can interpret consciousness in the widest sense to cover eventually whatever the concept of experience includes, the question concerns the experience-stream's own essential nature and that of all its components. To what extent, in the first place, must the material world be fundamentally different in kind, excluded from the experiences' own essential nature? And if it is this, if over against all consciousness and the essential being proper to it, it is that which is 'foreign' and 'other' how can consciousness be interwoven with it and consequently with the whole world that is alien to consciousness?"

Husserl refuses to solve the difficulty through objective unification. ". . . it is easy"—he writes—"to convince oneself that the material world is not just any portion of the natural world but its fundamental stratum to which all other real being is essentially related. It still fails to include the souls of men and animals; and the new factor which these introduce is first and foremost their 'experiencing' together with their conscious relationship to the world surrounding them. But here consciousness and thinghood form a connected whole, connected within the particular psychological unities which we call animalia, and in the last resort within the real unity of the world as a whole. Can the unity of a whole be other than made one through the essential proper nature of its parts, which must have some community of essence instead of a fundamental heterogeneity?" But here again Husserl has to refuse the easy answer, and his refusal serves to remind the reader that as a philosopher Husserl will not allow him to have anything to do with the transcendent world. His task as a philosopher is not to explain the relation of two 'objects' such as material nature and psychological experience, or even one object and one subject term, such

as material nature and the perceiving subject, but to confine his attention to the subject term itself and consider the relation which the actualities of the pure experience bear to the consciousness of objects with which they provide us. Husserl takes his problem with reference to the perceptive experience which "in a certain proper sense plays among experiencing acts the part of an original experience whence all other experiencing acts draw a chief part of their power to serve as ground." And here he sees one more danger at the hand of empiricism, the danger, namely, that the physical division between appearance and reality should be supposed to cover the difference between perception of object and object. There must be no question of trying to shoulder experience itself with the responsibility for the characteristics of appearances. Nowhere more completely than over this point does phenomenology differentiate itself from objective realism on the one hand, and naturalistic psychology on the other. There is a sense in which physical appearance may be distinguished from physical reality as something more 'subjective' than this last; but this is a division among transcendencies and must not be identified with Husserl's "pure" subjectivity of the immanent in consciousness, namely the conscious acts. As Hume long ago pointed out it is here a question of all or none. "... in physical method"—Husserl writes—"the perceived thing itself is always in principle the thing which the physicist studies and scientifically determines." "On no account should one fall into the fundamentally perverse copy-and-sign theories. . . . An image or sign points to something that lies beyond it, which could it but pass over into another form of presentation, into that of a dator intuition, might "itself" be apprehended. A sign and copy does not "announce" in itself the self that is signified (or copied). But the physical thing is nothing foreign to that which appears in a sensory body, but something that manifests itself in it. . . . In principle a thing, the precise thing of which the physicist speaks, can . . . be given only sensorily, in sensory "ways of appearance". . . . The thing which he observes, with which he experiments, which he sees continually, handles, places on scales, "brings to the fusing furnace," this and no other thing is the subject of physical predicates. . . . So too it is the perceived processes and connections themselves which are defined through concepts such as force, acceleration, energy, atom, ion and so forth". We are not to fall into the "'Realism' so fashionable in our day" and say that "what is really perceived . . . is to be regarded from its side as appearance or instinctive basis of something else inwardly alien to it and separated from it" and that this latter must on theoretical grounds be reckoned "as reality which for the purposes of explaining the way in which we experience these appearances must be accepted hypothetically as something wholly unknown, as a concealed cause of these appearances to be characterised only indirectly and analogically through mathematical concepts".

On the contrary: "the thing that appears to sense, which has the sensory properties, shape, colour, smell and taste is . . . far from being a sign for *something else*, though it is to a certain extent a sign for itself. . . . The thing that appears with such and such sensory properties under the given phenomenal conditions is . . . the sign and symbol for a wealth of causal properties of this same thing, which as such declare their presence in specific and familiar relations of dependence among appearances . . . even the higher transcendence of the physical thing does not imply any reaching out beyond the world for consciousness."

I have given these quotations at length because they form such an admirable antidote to a good deal of popular opinion, and represent an attack on what is perhaps the most concentrated focus of empirical prejudice and one of the most stubborn barriers to the recognition of the actuality and conditioning character of Husserl's phenomena.

There is not space to devote here to the examples of phenomenological description which follow this clearing of the ground. Perhaps the most significant contribution which they make to epistemology—their whole notion of conditioning *a priori* apart—lies in their use of the term "Intention".

This term wherein Husserl fixes the peculiarity of experience "to be the consciousness *of*" something was re-introduced into modern philosophy by Brentano. As it is used by Husserl it denotes the referential character of all consciousness. This referential character is due to the fact, which phenomenological reflection reveals, that the relation between subject and object which is evident in every case of apprehension is repeated within the limits of the subject term, where indeed it actually originates. Experience taken wholly within itself is seen to divide itself into what Husserl calls "noesis" and "noema", cogitatio and cogitatum in the widest sense. Noesis is an act of reference and the noema is the referred to within consciousness, an immanence in Husserl's language, the object as we are conscious of it. The noema does not intervene between the subject and the transcendent object—that would involve a representative theory: it is only brought under intuition at all when the transcendent object has been excluded from the attention. The relation between noesis and noema is the actual referring which the subject makes beyond the act itself. All this is very difficult and can only appear to have meaning when applied to the description of the subjective processes which Husserl claims the trained reflection discovers.

But it is this actual referential character of the stream of consciousness in its own nature and, so to speak, entirely within itself, of the whole of which in the ordinary attitude we are unaware, which Husserl holds responsible for our being able to make ourselves conscious of objects which transcend consciousness. Taken by itself, Husserl avers, consciousness shows itself capable of reference beyond itself.

This is a hard lesson. But Husserl does not regard it as food for speculative thought. He means it to describe what he has found; and what he has found he maintains is there for the finding.

The translator must have been at unusual pains to reach the measure of success he has with his translation. Except for the Author's Preface which seems to carry the marks of hasty work, he has made quite a readable book. He has had to grapple with the most difficult kind of German style, consisting of language literally modelled and often invented to express new conceptions.

English obviously lends itself much less readily than German to this sort of treatment. Our language does not distinguish between Erleben and Erfahren, or offer a terminological ending like Bewusstsein to express the existential sense in consciousness. I noticed an amusing "Internationality" for "Intentionality" on page 443. But for the most part the text seems wonderfully free from error.

The Analytical Index in particular, which Prof. Boyce Gibson has been at the trouble to translate from Dr. Landgrebe's Sachregister of 1928, is well done and adds great value to the English edition.

C. V. SALMON.

A Treatise of Formal Logic: its evolution and main branches, with its relations to Mathematics and Philosophy. By JØRGEN JØRGENSEN. London: Humphrey Milford, Oxford University Press, 1931. 3 volumes. Pp. xv + 266, 273, 321.

THIS *Treatise*, which occupies three large volumes, was in 1925 awarded the gold medal of the Royal Danish Academy of Sciences and Letters. The subject proposed to the competitors for the award was as follows: 'An investigation of the principal forms which general logical theories have assumed in the work of Boole and his successors, with a demonstration of their historical development and their relation to classical logic, and an indication of the position which logic should, according to these theories, occupy in relation to philosophy and mathematics'. Prof. Jørgensen says that in setting out to 'fulfil the requirements of the Prize Essay,' he bore in mind three further considerations. First, he endeavoured to write a book 'containing a large amount of positive fact, since this can always serve as the basis of further work, and it is never a loss to read a book which increases one's actual *knowledge* of facts, even though the writer's own observations thereon may be valueless in themselves'. Secondly, he sought to provide 'an introduction to the study of Formal Logic and its problems in their newest phases, without assuming more than an elementary knowledge of Classical Logic and elementary Mathematics'. His third purpose was to attempt to provide 'a proper handbook of the different theories of

logic and their stages of development'. The immense length of this *Treatise* is due to the attempt to satisfy these three aims.

There can be no doubt that a book conceived along these lines is badly needed. The progress of the science of logic during the last half century has been so great and has involved so wide a departure from the standpoint of traditional logicians that it is difficult for the ordinary student to discern the main line of development. Not only is it the case that original contributions to the subject have, for the most part, appeared in periodicals and other publications not readily accessible to the English student, but they are, moreover, extremely difficult, so that the average student requires 'first aid' to their understanding. The only work written in English that has attempted to provide this aid is Prof. C. I. Lewis's *A Survey of Symbolic Logic*. The interest of Prof. C. I. Lewis is, however, mainly confined to the treatment of symbolic logic considered as a calculus; he has, accordingly, little to say with regard to such work as that of Frege. Prof. Jørgensen has certainly endeavoured to remedy this defect. He devotes a considerable amount of space to Frege's views, his exposition mainly taking the form of prolonged, direct quotation from Frege's own writings. Seeing how difficult these are to obtain, this exposition is of considerable value. But its usefulness to the English reader, for whom this edition is presumably intended, would have been enhanced had these quotations been rendered into English. It may indeed be remarked in passing that the student who is unable to read German had better not attempt to read Prof. Jørgensen's book. On page after page, in one and the same sentence, German and English are so mixed as to make the reader wish that the whole had been written in German, especially as the English rendering is often quite unenglish in form and vocabulary.

The subject matter is distributed among the three volumes in accordance with the following plan. The first volume is mainly historical. After an introductory chapter distinguishing between classical Logic, Algebra of Logic, and Logistics, there follow three chapters dealing with the historical development of each of these branches. The second volume is concerned to expound each of them in turn. Prof. Jørgensen's account of Classical Logic is very unsatisfactory. For the student who has no acquaintance with traditional doctrines of logic it is useless; for the student who has such acquaintance it is unnecessary. For example, Prof. Jørgensen expounds the traditional doctrine of Reduction, even quoting and explaining the mnemonic verses which have too long disgraced the textbooks of logic; but he makes no attempt to explain the significance Aristotle attributed to reduction on account of the pre-eminence he assigned to the *dictum de omni*. So, too, Prof. Jørgensen wastes valuable space over the Sorites and other technical trivialities. Yet he asserts that his exposition has been 'restricted to the main outlines'. He makes no attempt to show how the logical doctrines of Aristotle may be generalised. The

space Prof. Jørgensen wastes over unimportant technical elaborations might have been more profitably employed in expanding his very brief account (in the first volume) of the work of A. B. Kempe and Josiah Royce. The work done by these two logicians (the former English, the latter American) is important, and is far too little known to English students. Their writings are difficult and not easily accessible, so that one might have looked to such a book as this for a useful introduction to their doctrines. Prof. Jørgensen, however, spares between them only five pages altogether, whilst his treatment of Royce's conception of the Σ -system is quite unintelligible.

The third volume contains a discussion of the relations between formal logic and mathematics, a statement of some views with regard to the nature of mathematics, a prolonged discussion of Russell's theory of types, and a formulation of nine problems that must, Prof. Jørgensen thinks, 'be solved before the foundations of formal logic and pure mathematics can be regarded as quite in order'. It is inevitable that a work based upon such a plan should contain a considerable amount of repetition and cross-references. Exposition and criticism are rather unfortunately mixed, so that the main lines of development tend to be obscured. Prof. Jørgensen seems to have read everything dealing with the problems he discusses, but he might have written a better book had he read less. There can be no doubt that his *Treatise* would have been more useful had it been shorter.

The main difficulty that the present reviewer has in understanding Prof. Jørgensen's point of view is the difficulty of discovering what exactly is his conception of the nature of Formal Logic. It is clear that he believes that it is concerned with *thinking*. Thus he says: 'In the widest sense the business of logic is to analyse and criticise thought,' and the object of formal logic is said to be 'to examine and set forth the conditions for thought's agreeing with itself' (I., p. 3). He adds: 'Formal logic has thus, in principle, nothing to do with the relation between thought and reality, but only with thought itself. It merely investigates what conditions are requisite in order that we can, from certain given premises, arrive at conclusions which shall be equally "correct" or true, with the premises themselves; or, more properly, what we may conclude from the premises by means of certain logical rules, and by these alone.' The basic principles of logic are said to be the 'rules for the actual deductive process'. Accordingly, Prof. Jørgensen states that 'Formal logic thus becomes a theory of the deductive process itself, and consequently occupies a unique position among deductive theories, in that it must, though formal, at the same time treat of something real, to wit, of actual thought, in so far as this is logically correct. It must, therefore, in contrast to all other deductive theories, consider the *meaning* of the signs employed, since it is obliged to formulate its axioms and definitions in such a manner that they shall agree with true logical

thought, which is at once its object and the instrument by which it is constructed' (I., p. 24). It is very difficult to see what precisely is the significance Prof. Jørgensen attaches to the phrase 'true logical thought,' and what are the 'other deductive theories' amongst which logic is said to occupy a unique position. These cannot be geometries or any branches of mathematics, since Prof. Jørgensen is an enthusiastic supporter of the view that mathematics has been shown to be identical with pure logic. Then again, in spite of insistence that the logician must pay attention to meaning, Prof. Jørgensen does not explain what he understands by 'meaning'. Such an explanation is surely required if he is to make clear what exactly his conception is.

It might be expected that some light should be thrown upon these difficulties when he comes to the discussion of what he calls the 'Real' and the 'Ideal Presuppositions of Formal Logic,' in Chapters XIII. and XV. of Volume III. But such expectations are not fulfilled. The discussion is confused owing to a complete failure to distinguish between the conditions under which the logician makes discoveries and the nature of those discoveries. The former relate to the logician at work; the latter to the science of logic. Prof. Jørgensen recognises two main groups of assumptions 'underlying the formulation and validity of formal deductive logic.' These are called respectively the *real* and the *ideal* presuppositions of logic. He says: 'By the former, I mean the conditions requisite for the actual existence of logic as an empirical fact, and by the latter, the conditions which determine the validity of logic, *i.e.*, of logical propositions' (p. 200). In speaking of 'the actual existence of logic as an empirical fact,' Prof. Jørgensen appears to be referring to the fact that the study of logic originated in an investigation of reflective thinking in order to determine the conditions under which such reflective thinking is valid. But this historical fact does not suffice to give logic a unique position among any 'other deductive theories,' such, for instance, as pure geometry, the study of which originated in an analogous manner. Prof. Jørgensen contends, however, that 'formal logic is neither purely inductive nor purely deductive, but must be formulated by the application of both methods'. He adds that 'to say that formal logic is formal and deductive thus does not mean either that it has no content or that it can proceed by purely deductive methods.' He maintains, on the contrary, that 'deductive logic as an empirical fact, presupposes an inductive logic—not in the sense of a theory of induction, but in the sense of a science which must apply the inductive method before it can apply the deductive' (pp. 207-208). The inductive method is to be applied to *thoughts*. The logician has to 'think about what has been thought'. He says: 'Such mental operations upon the results of previous mental operations—the thinking about thoughts—may be called logical, and its further results registered as logic; and as long as we are only concerned with the forms of thought, its properties and relations, we

may give to this category the name of formal logic' (p. 209). In view of these statements it is not surprising to find Prof. Jørgensen suggesting that we might 'suppose that the logician would apply to the psychologists for information as to what thoughts and thought-combinations are, and what are their properties, for psychology is the science of mental phenomena.' Evidently he thinks that this procedure would be entirely reasonable were it not for the failure of psychologists to give any definite answer to the questions as to 'how many different kinds of thought there are' and 'what laws hold good for their occurrence in the mind' (p. 215). Nevertheless, he is convinced that 'it is obvious that a solution of the problem will be of great importance not only to psychologists but also to logicians, who should therefore follow attentively the further development of the question'.

All this appears to be extremely confused. Those who regard logic as 'thinking about thinking' usually deny that logic can be formal, and altogether repudiate the conception of logic entertained by such mathematical logicians as Whitehead and Russell. Such a procedure is at least consistent. Prof. Jørgensen, however, whilst holding the former view is also an enthusiastic adherent to the views of these two mathematical logicians. But he makes no attempt to show how these opposed views with regard to the nature of logic can be reconciled. Nor does his statement of the ideal presuppositions of logic make his position any clearer. It will be remembered that these 'ideal presuppositions' are 'the conditions which determine the validity of logic, *i.e.*, of logical propositions.' But with regard to the notion of validity Prof. Jørgensen has nothing to say. The word itself does not even appear in the index. He contents himself with such oracular statements as 'that a thought is valid means that it is true' (p. 276). He says that it follows from this statement that 'the question as to validity of thoughts can only be raised with regard to objectives,' for 'only objectives can strictly speaking be said to be true'. The word 'objective' is taken from Meinong, and is interpreted by Prof. Jørgensen as meaning *the assertion* as distinguished from *the object* of which something is asserted. He then distinguishes between *material truth* and *formal truth*. 'By material truth,' he says, 'is understood a relation between an objective and the fact to which it refers.' This he holds to be 'the usual and fundamental meaning of the word "truth"'. Objectives are said to be 'complete thoughts'. We are told that 'the material of logic consists of complete thoughts, *i.e.*, thoughts that can be properly declared to be true or false' (p. 241). These 'complete thoughts' are the 'something real' of which formal logic was said—in a passage already quoted—to treat. But Prof. Jørgensen also maintains that 'formal logic, as such, has nothing whatever to do with reality' (p. 292). Possibly the conception of *formal truth* is expected to save these views from obvious inconsistency. But this conception itself remains obscure. Prof. Jørgensen contents himself with the

statement that 'Formal truth is generally understood as a relation between one objective and another, a system of objectives being said to be formally true if it is consistent, or, more particularly, if it constitutes a deductive system.' But since it has already been said that for a thought to be *valid* is for it to be *true*, this statement throws no light upon the nature of formal truth in relation to the insistence upon the objective as a complete thought and the account of the fundamental meaning of the word 'truth' in terms of the relation between an objective and the fact to which it refers. Prof. Jørgensen does not seem to realise that what is meant by saying of a proposition that it is *materially true* (in his sense) is something quite different from what would be meant by saying that it is *formally true*, if by 'formally true' he means 'consistent relative to some given deductive system'. This distinction is surely not one between a *more* fundamental, and a *less* fundamental meaning of the *same* concept. It is no doubt his failure to grasp the nature of this distinction and its relevance to the conception of formal logic that has led Prof. Jørgensen to deny that formal logic 'can proceed by purely deductive methods,' and thus to confuse questions relating to the procedure followed by the formal logician when he sets about constructing a deductive system and the nature of the system thus constructed. Consequently, Prof. Jørgensen has nothing to say with regard to logic conceived as the study of all completely abstract, and therefore completely general, deductive systems. Yet his acceptance of the views of Whitehead and Russell would suggest that he does so conceive formal logic. But in that case he should surely discuss the notion of *validity* in contradistinction to that of material truth. This, however, he fails to do.

This failure to make clear what exactly is his conception of Formal Logic, in spite of the length of his discussion, constitutes a serious demerit in Prof. Jørgensen's *Treatise*. The main value of these three volumes is that they bring together a number of different theories, and provide the elementary student with plentiful material drawn from a wide variety of sources. Undoubtedly the student who is beginning the study of mathematical logic will find much that is of use in these volumes. But they do not form a contribution to the advancement of the subject. In his detailed discussion of the relation of mathematics to logic Prof. Jørgensen follows Whitehead and Russell. It is much to be regretted that his account of *Principia Mathematica* is almost entirely limited to the first edition. He has nothing whatever of any importance to say with regard to more recent theories concerning the nature of mathematics.

L. SUSAN STEBBING.

VI.—NEW BOOKS.

Scepticism and Construction : Bradley's Sceptical Principle as the Basis of Constructive Philosophy. By CHARLES A. CAMPBELL. London: George Allen & Unwin, 1931. Pp. xxiv., 322. 12s. 6d.

THE eight chapters of Mr. Campbell's book fall into two main groups. The first three chapters (pp. 1-112) are concerned with Bradley's view of the relation of knowledge to reality, the other five (pp. 113-322) analyse certain features of moral and religious experience. The link that connects the two parts of the book together is the doctrine that the ultimate reality is supra-rational and unknowable. In the first part it is argued that this doctrine is the true outcome of Bradley's metaphysics, and in the second that only on the basis of this doctrine can the reality of human freedom, the validity of moral obligation, and the truth of religious belief be vindicated. A brief indication of the main contents of the successive chapters will show the author's line of argument.

The opening chapter first develops the negative side of Bradley's doctrine, *viz.*, that thought cannot attain its own ideal of a completely self-consistent and all-inclusive apprehension of reality, and then argues that, since 'thought-products and Reality are strictly incommensurable', the doctrine of Degrees of Truth and Reality must be given up. Mr. Campbell would therefore emphasise what he regards as the 'sceptical' implications of Bradley's view. In the second chapter he defends his conception of a supra-rational Absolute against criticism, and in the third develops as a consequence of his view a distinction between the unattainable Noumenal Truth which would be required to satisfy the full demands of the intellect and the attainable but merely Phenomenal Truth which may in some cases be for our finite minds ultimate, in the sense that we cannot transcend it, but which we must recognise to be definitely on a lower plane.

Chapters iv. and v. state and defend against criticism the author's doctrine of Moral Freedom. I am inclined to think that these two chapters are for Mr. Campbell the central part of the whole argument. The following passage at any rate seems significant. "Paradoxical as the contention may at first sight appear, I am prepared to argue that it is only if the 'order' postulated by the intellect be interpreted as an order *not* intelligible that Reality can in the end be legitimately taken as 'cosmos' rather than 'chaos'. For—and here lies the crux of the matter—man is a conative as well as a cognitive being—and *qua* conative he *must* believe in his own personal freedom, *must*, *i.e.*, recognise that there is in reality that which is incompatible with the logical continuity of an 'intelligible order'" (p. 80). As regards the doctrine of freedom expounded by Mr. Campbell it may suffice in the meantime to say that it reminds one strongly of James's doctrine of the indeterminate effort in virtue of which we are able to act in the line of greatest resistance.

Chapter vi. defends the idealistic doctrine of desire and expounds a doctrine of moral obligation which is on the lines of T. H. Green's. The two previous chapters showed that the 'ought' of morality is meaningless apart from freedom; this chapter vindicates the 'ought' itself by showing that it is "rooted in the very nature of self-conscious experience" (p. 246). Chapter vii. follows in the same line by arguing that our moral valuation of conduct and character depends essentially and solely on the amount of will-energy shown by the moral agent in striving to realise his ideal; so that our moral valuations also are held to imply the truth of the doctrine of freedom previously set forth. The concluding chapter argues that the only solution for the paradox of the religious consciousness—its union of serene confidence with moral earnestness—is to be found once more in the conception of a supra-rational God or Absolute. Mr. Campbell does not lay so much stress, however, on the argument from religious, as on that from moral, experience, because he thinks that the religious consciousness cannot be shown with the same cogency to be an "irremovable aspect of experience".

As regards its formal qualities Mr. Campbell's book has conspicuous merits. It is written in a clear and vigorous style and is always interesting. It contains a great deal of philosophical discussion in a moderate compass, because Mr. Campbell has the art of stating his points at once briefly and adequately. He is at pains to make the course of his argument always clear to the reader, often foresees the objections that one would be inclined to raise and has his answer to them, and in the details of the argumentation his competence and acuteness are amply evidenced. As regards the matter of the book and the larger aspects of its argument, on the other hand, I must speak in a more qualified way, because it seems to me that in the two fundamental doctrines of the book—the doctrine based on the interpretation and development of Bradley's view, and the doctrine of moral freedom—Mr. Campbell has taken up positions that are not really tenable.

The questions raised in connection with Bradley's view about knowledge and reality are so far-reaching that I must be content simply to state where in my opinion Mr. Campbell goes wrong. It seems an error, in the first place, to speak of Bradley's 'sceptical principle'. Bradley tells us himself what he means by the scepticism which he practises, *viz.*, "an attempt to become aware of and to doubt all preconceptions" (A & R, Pref.). Of scepticism as a doctrine he speaks scornfully. And it is not in fact scepticism to hold that knowledge could not be all-inclusive without ceasing to be merely knowledge. The source of Mr. Campbell's error is that he separates the negative side of Bradley's doctrine from its positive counterpart, and such a separation seems quite inadmissible. To reject the doctrines of degrees of truth and reality is to cut away the basis for any assertion about the Absolute. The truth which Mr. Campbell calls 'phenomenal' is not a truth from which reality is absent, nor can we speak of the "essential unknowability of the real" (p. 55). To assert such things would be for Bradley to deprive truth and reality alike of all meaning. Again, to contrast 'phenomenal truth' with a higher 'noumenal truth' is to miss Bradley's point altogether, and as for a 'supra-rational truth' Bradley, I should suppose, would have regarded such a phrase, if taken strictly, as quite unmeaning.

Of his doctrine of Moral Freedom Mr. Campbell says himself (p. 114 n.) that it is "of a type adherence to which appears to be almost universally regarded as a sure mark of philosophic immaturity", and he shows courage

in sticking to his guns notwithstanding. But no amount of courage will compensate for the fact that he seems not to have really grasped the view against which his own is mainly directed. So far as I see he does not in the least realise that on a view such as that of T. H. Green mechanical determinism and mechanical indeterminism are both alike false, and that all argument that starts from their *common* false assumption is beside the mark. (It is surprising that none of the numerous teachers and friends to whom Mr. Campbell makes acknowledgments in the Preface should have warned him of this.) His own doctrine seems to be nothing else than mechanical indeterminism. "The capacity for will-effort", he says (p. 167), "is that which makes possible action against the line of least resistance, action in the line of a felt weaker (but believed higher) desire. If there were no such capacity for reinforcing a higher but weaker desire against a lower but stronger desire, all action would of necessity follow the bias of the agent's existing conative tendencies." Here the "existing conative tendencies" are the quasi-physical *vis a tergo*, and will-effort the indeterminate force that counteracts them.

There are two experiences upon which Mr. Campbell specially relies as evidence for his indeterministic doctrine. One is the consciousness of open possibilities in the moment of deliberate action; the other is the experience of the 'effortful act of will'. He seems to think that 'Idealism' is concerned to deny or explain away these experiences: "the freedom for which Idealism contends is certainly not a freedom which involves a capacity for alternative action" (p. 121). But is it really to be supposed that Idealism denies the fact of choice? And when a person has to choose between two courses of action, are not both possibilities open until he has decided between them? The fact is, however, that Mr. Campbell is substituting his own view of what the Idealist ought to hold for the view which the Idealist actually does hold. Again, it seems an error in principle to make so much of effort as an evidence of activity and freedom. Anyhow there is no reason why the idealist should wish to explain away 'the sense of effortful activity', and it is absurd to accuse Bradley of an 'inveterate hostility to the concept of activity'. As regards the 'capacity for reinforcing the higher desire', the real question is not whether we have the capacity, but how it is evoked, for, if not by the higher desire itself, then surely by some other desire which serves to reinforce it.

The chapter on Moral Obligation starts with a rejection of the 'Socratic theory of the will', but otherwise follows in the main Green's view. Mr. Campbell endeavours to defend Green's doctrine of desire from the charge of psychological egoism, and is unwilling to make any concession to the critics even as regards the passage in which Green states that the good for which the agent acts is always conceived by him as '*his own good*'. In view of the continuation of the passage in Green, one may indeed find it impossible to believe that he *meant* to assert any sort of egoism, but one can hardly avoid admitting that his language is ambiguous and unfortunate. In regard to the obligatory character of the idea of the good of the self as a whole I think Mr. Campbell's doctrine of freedom does give him an advantage over Green.

The remaining two chapters I must pass over, not because they do not furnish plenty material for discussion, but because they could not well be discussed in a short space. I ought, however, to say that the chapter on Moral Valuation seems to me one of the best in the book, though I should have to dissent from much of its argument. Even as regards the chapters dealt with above I have had to omit reference to numerous

subsidiary topics. Mr. Campbell has provided an excellent analytical table of contents, which makes it easy to find what he has to say on any particular topic.

H. BARKER.

The Scientific Outlook. By BERTRAND RUSSELL. London: George Allen & Unwin, 1931. Pp. 285. 7s. 6d. net.

THERE is no doubt that a philosophy which takes its inspiration from modern science rather than from ancient dialectics possesses a vigour and a stimulus quite beyond the reach of the obscure and solemn ghosts that gibber about the traditional 'problems' of philosophy. At any rate this is so when scientific philosophy is expounded by one with Earl Russell's clear head and mastery of speech. His present book also abounds in illuminating discussions and startling suggestions, strung upon a continuous argument, beautifully served up and spiced with pungent wit. Mechanically it is divided, like Cæsar's Gaul, into three parts, dealing with scientific knowledge, scientific technique and scientific society. The first part contains chapters giving examples of scientific method, its characteristics and its limitations, and then a chapter on scientific metaphysics and one on science and religion, in which the criticism of Messrs. Eddington and Jeans should alone make the fortune of any book. The second part begins with a chapter on the beginnings of scientific technique, and then traces its operation in physics, biology, physiology, psychology and sociology. In the third part Lord Russell assumes the prophet's mantle, and seeks to forecast what science will make of man and of human life, when it gets complete control, as he believes it will. His predictions are decidedly gruesome (*cf.* pp. 257, 260 f., 267), reminding one of Mr. Wells's *Time Machine* and *Island of Dr. Moreau*, and still more of an anonymous romance published some forty years ago, called *Thoth*. Yet they are arrived at logically, and extremely plausible, though it is carefully pointed out (p. 279) that "science, having delivered man from bondage to nature, can proceed to deliver him from bondage to the slavish part of himself. The dangers exist, but they are not inevitable."

The truth is that in his attitude towards science Lord Russell is divided against himself. He has grasped the enormous significance for human life of the new conception of knowledge as power, and seen that it is the real meaning of pragmatism, which he now no longer conceives as a childish philosophy of wish-fulfilment (p. 270); he values power-knowledge as emancipating man from superstition and subjection to material nature. But he has not yet reconciled himself to it, emotionally. He is far from being a wholehearted scientist himself, and an admirer of all that science threatens to do for man. He fears that it may destroy poetry and joy and beauty and love. This fear is rooted in what he would doubtless confess to be his unscientific self, and ultimately in a dualistic distinction he retains between the knowledge which is contemplation (p. 270) and the knowledge which is power. The former is essentially æsthetic, the knowledge of the beatific vision (p. 271). The latter is the aim of "the scientific society in its pure form" and "is incompatible with the pursuit of truth, with love, with art, with spontaneous delight, with every ideal that men have hitherto cherished, with the sole exception of ascetic renunciation" (p. 274).

It may, however, be shown that these fears spring from Lord Russell's dualism, and that this dualism is a mistake, and a survival from an antiquated conception of knowledge which the scientific conception has superseded. Lord Russell has not, like most philosophers, just closed his eyes to the validity of scientific knowledge, but he still hankers after the old 'contemplative' ideal, which he once held exclusively. This divided allegiance sets up a constant strain in his mind and drives him even into inconsistency: but a more complete adoption of the scientific ideal would extricate him from his difficulties, and show that his fears were groundless.

It is easy to show that his difficulties all arise from his clinging to the dogmas of the old (prescientific) epistemology. For example, he starts off (p. 15) with defining scientific method as "remarkably simple" and as consisting "in observing such facts as will enable the observer to discover general laws governing facts of the kind in question." This definition is clearly objectionable, in that it conceives the 'law' as 'governing' the 'facts' which exemplify it, and modern scientists (when they are careful) avoid and disclaim this metaphor (*contrast* pp. 59, 117). They know too well that their 'laws' are mostly (if not all) statistical, and use them merely as instruments of manipulation and prediction. And Lord Russell knows this too (p. 107). What is still more serious is that he omits to inquire *why* the scientist *wants* to discover *general* laws. Had he asked this question, he would of course have received the answer 'for purposes of prediction and control of other cases'; and thus would have had to admit that laws are not valuable for their own sake. Indeed he knows this also himself; for on page 24 he mentions laws as means by which "future particular facts could be predicted," and on page 133 admits that the world's "concrete variety is an equally legitimate object of knowledge." The old (Platonic) doctrine, then, that "science is not concerned essentially with the particular" (p. 58) is simply false.

But if it is false, it is no longer possible to adduce any good scientific reason for abstracting (except for the nonce) from the human and *personal* side of knowledge, that is, for making the abstraction which is, superficially, most characteristic of scientific procedure. It should no longer be said that "scientific method sweeps aside our wishes and endeavours to arrive at opinions in which wishes play no part" (p. 45, *cf.*, however, p. 275, where "the sphere of values lies outside science, *except in so far as science consists in the pursuit of knowledge.*")¹ But is not the wish to know as good, and as much of, a desire as any other? Is not the True as much a value as the Good and the Beautiful? And is not *human desire* the great common measure which renders all values commensurable? Does it not become unnecessary, then, to warn science off the realm of values and to posit any antithesis between science and values?

If, then, the impulse to all knowing springs from a personal striving for a personal value, there need be no fear that the other values will be overlooked, either by the individual or by society. For both will naturally aim at a harmony as complete as their resources allow. If, however, any one attaches importance to preserving the application of the epithets 'impersonal' and 'disinterested' to such values as are not merely personal but can be referred to a 'common' world and *shared*, by all means let us keep them, so long as we are not deluded into imagining that our knowing really is what they traditionally call it (*cf.* p. 185).

¹ Italics mine.

What this criticism amounts to is saying that we should all be better off, if we contented ourselves with the knowledge that is power, and ceased from the vain ambition of achieving the 'metaphysical' knowledge which only plunges us in 'scepticism'. If, as Lord Russell says, the enlightened physicists of our day no longer believe in matter (p. 83), nor in physical laws (pp. 88, 99), and if "order, unity, and continuity" are revealed as "human inventions just as truly as are catalogues and encyclopædias" (p. 101), this is no reproach to science but its glory, so long as it is admitted that "the ultimate metaphysical doubts which we have been considering have no bearing whatever upon the practical uses of science" (p. 102). What right has anyone to talk of a "collapse of science" (p. 98), so long as "science as the pursuit of power becomes increasingly triumphant" (p. 104)? What need has the scientist for any metaphysic? What need, especially, for a metaphysic his methods cannot justify? Why not let it be discarded as meaningless and pseudo-science?

Let the scientist then recognize, fully and frankly, that scientific knowledge is essentially a product of *method*, not of dogma. Let him cease to apologize for providing man with a knowledge which grows ever more potent and more satisfactory, and can grow for ever. Permit him to say that it is only an obsolete sense of 'truth' and an inveterate prejudice in favour of excluding from the definition of reality all reference to the human operations by which that reality is ascertained, that stand in the way of complete acceptance of scientific knowledge. It is these also which have created the difficulties about Heisenberg's principle, to which Lord Russell devotes so much attention (pp. 95-96, 108-112). But if it is granted that 'knowing' may be an *operation*, it follows easily that the operation of knowing an electron may alter its place and velocity, as Dewey pointed out some time ago (*Quest for Certainty*, pp. 192-196). Similarly, if it is granted that the 'law' of causation is a principle of method, it becomes obvious that it will continue to be used wherever it can be, and that no behaviour of electrons can confute it. Nor, on the other hand, will any question whether determinism is a metaphysical fact arise from its methodological use. In short, it will be recognized that the *scientist* has not as such any need for any metaphysics, which are all of the nature of *poems* in which the *philosopher* may indulge, according to the measure of his personal idiosyncrasy, in order to round off and harmonize his cosmic survey—after he has acquainted himself with the solid knowledge the sciences have garnered.

F. C. S. SCHILLER.

Das Lyrische Gedicht Als Ästhetisches Gebilde. By Johannes Pfeiffer.
Halle (Saale), M. Niemeyer, 1931. Pp. 113. M. 5-50.

COMING from the same Husserlian school as Roman Ingarden's treatise also reviewed in *MIND*,¹ and published almost immediately after it, this little book is an interesting complement to the larger work, boldly tackling in its short compass the metaphysical problems which that work rather

¹ January, 1932, p. 97.

avoided. It is a phenomenological attempt to determine the 'ontological place' of the lyric. Why of the lyric only? Shall we then, one is tempted to ask, next have attempts to determine the 'ontological place' of a mule as distinct from that of a horse, or of dreams about flying as distinct from other dreams? A refutation of the *reductio ad absurdum* implied in this question can be found, if anywhere, in the author's assertion (p. 2) that he is really dealing with poetry as such (art as such, he might have said) and that limiting the field of examples, say, to the New High German lyric since Opitz, does not matter; the lyric showing us more clearly the 'intentional constitution' of a work of art in speech than does the epic or the drama. But does this limitation not matter? What if the 'metaphysical', 'transcendent' or 'religious' atmosphere more obvious in drama, epic and architecture than in the lyric, should really contain the secret of the essence of art? What, above all, if the element of emotion or mood (*Stimmung*) which is so prominent in all lyric and perhaps more prominent than elsewhere in the New High German lyric since Opitz, but which, nevertheless, extending Broder Christiansen's theory, we may perhaps say constitutes only the vocabulary of the work of art, should be an *ignis fatuus* leading Herr Pfeiffer like so many others into a Serbonian bog? Howsoever that may be, it is after *Stimmung* that he goes and in that difficult chase we must follow him. *Stimmung*, or what less or more than this is denoted by the following, among other, terms: *Stimmungsqualität, Stimmungsähnliche Qualität, Stimmungszustand, Zustand, Zuständigkeit, zuständige Gestimmtheit, geistiger Zustand, psychischer Sachverhalt, seelische Tönung or Färbung, Leben, Lebens-lage, -zustände, -stimmungen* or *-bedeutsamkeit, stimmungshafte Bedeutsamkeit, Existenz, das befindliche In-Sein, daseinsmässige Befindlichkeit, menschliches Dasein als so-und-so gestimmtes, je-individuelle Person, Du*, this is what is represented, contained or expressed in, made living, present, objectified, conjured up, stored up, preserved, caught, imprisoned, revealed, manifested, in, by or through, the lyrical poem, chiefly and directly in its musical stratum of word-sounds, rhythm and tone; this is what is apprehended, experienced, lived, lived through, re-lived, participated in, by the subject in or through the poem. This theory, set forth in a rich variety of more or less synonymous expressions, is sharply distinguished from the *Einfühlung* theory both of Lipps and Volkelt which is ably criticised on the ground chiefly that it leaves everything to the *Einfühlung* and *Einfühler* and nothing to the æsthetic object, the 'thou' of which, or the person other than the *Einfühler* and obviously present in the poem, it entirely neglects for the simple reason that it cannot give an explanation of or have room for any knowledge of a 'thou' or of a person other than the knower. True, the æsthetic object depends for its æsthetic being, for its expressiveness, on the presence of an experient subject capable of a certain kind of experience in whom it can 'resound' (*anklingen*); yet it is not this experient or his experience that constitutes the being of the object; for the latter obviously speaks to him, shows him something which is in itself and not in him, makes claims on him, prescribes to him, compels him to feel or experience this and not that. Besides, the æsthetic experience is a getting away from oneself and not an absorption in one's own feelings. Nor is the object just an object into which *Stimmung* has to be projected or injected; the *Stimmung* belongs to it as does its colour; inner and outer are one. The corporeality (*Leiblichkeit*) of the work of art is itself not sensibly perceptible (*sinnlich-wahrnehmbar*) but ideal-sensuous (*ideell-sinnlich*) or spiritual (*geistig*), to be distinguished from the material existence of the embodying

stratum which is its basis (*fundierende Inkorporationsschicht*). Only in such a corporeality can there be a oneness of expressing form and expressed content (p. 74). (This last notion is exceedingly important but scarcely worked out. What is the relation of this *Leiblichkeit* to (a) *Stimmung* or *Gefühl*, (b) the *Inkorporationsschicht*, and what is the relation of (a) to (b)? Some light may be got from page 30 where the 'rhythmical inner form' or the rhythm of experience is contrasted with the metre, 'the visible, measurable, calculable, external form of the poem'. See also pages 57-59, 80-81, 103. From some passages it would seem that by this '*Leiblichkeit*' is meant that which is identical in what Ingarden calls the different concretions of the work of art. But this identity, Ingarden has shown, is not, strictly speaking, *ideal* or subsistent.)

However much we may be justified in saying that in the poem is present or condensed real life or a life-situation, we must also say that it is separated from real life by a 'qualitative *saltus*'; it is worked out 'magically' in an 'ecstatic moment of the unconscious' in which alone expressiveness can be achieved. In aesthetic experience man is withdrawn, ecstasized (*entrückt*) from his factually-existent self which is care (*Sorge*), from spiritual (*geistig*), historical, factual existence, and placed in an island of experience or *Stimmung* which is self-sufficient, unrelated to and entirely cut off from the life-process or the content of life-experience (and from every other aesthetic 'island', it should be added). He is released from all interests, motives, tendencies, desire, morality, from his life of self-becoming self-making, self-concernment. The antithesis is annulled between the experienced and the 'ought' ('*erlebt*' und '*gesollt*') as is also that between 'individual' and 'general'. (How this latter annulment is effected is not clear. But we learn that in the poem there is 'a subject as an egopole which as individual is general because it has become generally experienceable through idealising objectification'. The ego is not this Claudius, Hölderlin, etc. Neither is it a subject in general in the abstractly formal sense, reached like conceptual generality through getting rid of individual determinations. Nor is it like ethical generality attained through devotion to a supra-individual self. Individuality has become experienceable in its individuality, i.e., conserved for possible participation in the re-creating constitution of the poem (p. 41)). The transformation takes place in the unconscious, consciousness standing for man as self-concernment and unconsciousness for man as self-forgetfulness. Aesthetic experiences are not acts consciously performed by a 'who'; they are 'who-less'; they happen in me and to me; not 'I' make the aesthetic product, but 'it'. The event in which a poem is constituted cannot be placed in the context of historically existing reality but belongs to a 'transhistorical margin-dimension'. But the author does not, like many others, consider the aesthetic experience a spiritualisation, redemption or elevation of man. For to man as spiritual and significant belongs, essentially, historical, factual existence. The aesthetic experience is a repression of this and so of spiritual existence and not merely, as psycho-analysis would have it, of the vital-erotic impulse. It is thus a kind of de-actualisation, decay, decadence, of experience, and, according to Kierkegaard, a sin. It is also an annulment of the subject-object antithesis: "transhistorical subjectivity (*Zuständlichkeit*) has transformed itself in aesthetically structured objectivity to the point of identity between subject and object; the object is not except as subjectified (*verzuständlicht*) and the subjective state (*Zustand*) is not except as objectified (*vergegenständlicht*)" (p. 104). Experience is preserved, potentially present, in the poem in such a way

that it does not need re-living repetition by means of recollection, which always entails change, but can 'return' as far and as often as any æsthetically ecstaticized being 'falls under the poem's spell'. This last as well as all the preceding facts implies that time also, while in some way preserved, is yet annulled in the æsthetic experience. For the historical moment never 'returns' but is a 'now' swallowed up in the 'has-been-will-be' (*gewesende Zukunft*) as which a man factually exists; it can only be repeated by recollection with change. As an objectification of life (*Lebensobjectivation*), the poem springs from such a moment (108-109), and the momentary life-situation objectified in the poem is repeated with change through recollection and re-living, and thus time (*i.e.*, the 'has-been-will-be'), the meaning of care or factual existence is preserved in it. But as a purely æsthetic product, in which subject and object are identified, as discontinuous with or as an ecstaticizing out of care or historical time or the 'has-been-will-be,' as constituted in 'an ecstatic moment of the unconscious,' it springs from and rests in a transhistorical moment which is not swallowed up by the has-been-will-be but is a 'standing present' ('*stehende Gegenwart*') or 'eternally present'. Artistic creation or recreation is 'oblivious' existence ('*vergessendes Dasein*'). The unrelated floating islands of the present (*beziehungslos-schwebende Gegenwartsinselfn*), of punctual states or standing 'nows', cannot be recollected or repeated or passed through in their selfsameness; for this to be possible, connection with the context of factual existence is necessary. They can only 'return'. In them time, the temporality of factual existence, is annulled or 'ecstatically' transcended; they can never 'have been'; they are and are no more, in such a way, however, that they remain potentially present, that is, that they can return as far and as often as an æsthetically ecstaticized being falls under the spell of formatively transformed *Gestimmtheit*; yet they are momentary and fragile; in them we can stay, but only momentarily and transitorily not abidingly and with contemplative enjoyment. The 'standing present', the transformation of occasional momentariness into a standing present, is the peculiar marvel of the lyric. It is a repression of time, in which all the other 'repressions' are entailed. It is this repression which constitutes the 'decadence' already mentioned. In the 'standing present' are brought together all the other determinations already given: self-forgetfulness ('who-lessness', unconsciousness), play, subject-object identification.

Phenomenology here seems to be no more than a statement or description of problems. It is much and, in Æsthetics, perhaps the most important thing. Yet a kind of explanation of the *prope clarum per obscurissimum* seems to be aimed at: at any rate, each time an aspect of the problem has been stated, it is repeated over and over again in ever more difficult sentences and vaster, more nebulous and untranslatable compound nouns which surely must be a trial to others besides the wretched foreign reviewer. Because of the linguistic and stylistic difficulties I may have misinterpreted. If I have done so, I apologise. Of antinomies we should not complain. They are a sign that the phenomenon has been penetrated to its depths and has been 'saved' and not sacrificed to the tempting simplicity of rationalisation or explanation. Yet some of the antinomies may be due to trying to find the essence of poetry in *Stimmung*. Had the author emphasised more 'an individual person' or 'spirit', an expression which he uses as apparently synonymous with *Stimmung* or a person's momentary, datable experience, he would have been comparing a poem to something that is itself inner and outer, soul and body, temporal

but surely also 'timeless' in some one of the many senses of that difficult term. He would still have been left with many antinomies. But some at least would have been shown to be not peculiar to the lyric or to art.

P. LEON.

Hegel's Phenomenology of Mind. Translated with an Introduction and Notes, by J. B. BAILLIE. Second Edition, 1931. London: George Allen & Unwin, Ltd. Pp. 814. 25s.

THE first edition of this translation was published in 1910. Its appearance was an important event. For the first time a major work of Hegel's, to the importance of which Hegel himself called such emphatic attention in the introduction to the *Logic*, became accessible in English. With all its blemishes, the original translation represented a notable achievement, the material of no work of Hegel's being so recalcitrant as that contained in the *Phenomenology*. In the second edition, the translator has made extensive alterations and revisions, with the result that now we have a much improved text. Some reproductions are closer to the original, and others, though not so faithful, are more readable. The painstaking labour the correcting of the previous edition involved is evident throughout. For this the translator cannot be commended too highly. Thanks are due also to the editor and the publishers of the Library of Philosophy for having made possible a new edition (in the more convenient form of a single volume in place of the original two volumes) of a work so truly monumental.

But when all is said of the translator's meritorious labours, many passages still remain of which one would have liked a different reproduction. This is inevitable. Mr. Baillie himself candidly acknowledges that "a translation of a work of such originality and profound insight into the operations of the human spirit—a profundity which is often dark as well as deep—must necessarily be in large measure an interpretation of the thought as well as a rendering of the language of the text." This, of course, is true of every product of Hegel's genius, but singularly so of his *Phenomenology*. No other book of his precludes in the same way literal representation. Hegel's thought is not only dark and deep; it is often nebulous and enigmatic. The treatise is replete with pages of unpardonable obfuscation, to translate which is to interpret.

Such pages apart, which are untranslatable because their thought is opaque, there are others whose meaning, though clear, is expressed in perverse language. Many equivocal terms and phrases, employed by Hegel with deliberate intent to convey crucial ideas, appear in the translation in a form too weak or too attenuated to do justice to the original. The notorious obscurity of Hegel's style may be traced to his tendency to use polysynthetic words. These words serve to express in condensed fashion either the incongruity of a given situation or the transition to a new insight. The truth must be acknowledged that not infrequently Hegel descends, without the slightest shame, to the most outrageous puns which take the place of serious arguments. Here are a few specimens, selected at random, which do yeoman service in Hegel's text—*Meinen, Wahrnehmen, Aufheben, Wesen, Begriff, Erscheinung, Schluss, Eigensinn, Andacht, Grund, das Leben nehmen, Sache, Gemeinwesen, Bildung, Einsicht,*

Absicht, Verstellen, Offenbarsein, Einbildung, Erinnerung. These expressions and a host of others, as Hegel manipulates them, simply cannot be translated in any literal fashion. The English equivalents chosen by the translator do not always convey the equivocations attending them in the original, and on these equivocations hinges much of the irony and the subtlety of Hegel's mode of analysis. In the absence of single English synonyms, the problem confronting the translator can be solved only by contriving phrases which would contain all the shades of meaning the polysynthetic expressions are designed to harbour, and this Mr. Baillie has failed to do. The result of such failure is often disastrous.

In one particular instance, the univocal translation of one of Hegel's polysynthetic terms has worked havoc with a section full of sardonic humour and pungent wit. The term *Sache*, as it figures in the section entitled *Das geistige Tierreich und der Betrug oder die Sache selbst*, Mr. Baillie renders generally by the term "fact," thus giving a wholly erroneous interpretation of Hegel's meaning. *Sache*, in Hegel's comic portrayal of a certain form of individualism, signifies not "fact" but "cause"; it is the presumptive "object" of loyalty and service on the part of those who use it as a cloak to hide hypocrisy and conceit. For example, one often hears that the "affair" or "concern" (*die Sache*) of artists and scholars is to promote the "cause" of art or of learning; but the "object" that really matters, for the "sake" of which they labour (*die Sache selbst*), has to do with personal ambition and glory. Individuals, greedy of honour and adulation, loudly profess disinterested devotion to an "objective" task, but such professions are too disingenuous to be accepted at their face value. The worthies that compose the "spiritual menagerie" avow with feigned modesty that their "work" is but a small offering on the altar of the universal cause, but watch them wax querulous and vindictive if, challenging their false humility, you agree with their judgment. Let the pontifical critic, all in the name of the same cause, dispute their claim to originality, and observe the vanity in the vehement defence of the title. The humbug (*Betrug*) of such vainglorious animals deceives no one: the play is the "thing"—*ein Spiel der Individualitäten*, Hegel calls it—the display of subjective talent and genius, and not loss of personality in an over-individual ideal. The term *Sache*, big with many synonyms, is here crucial; the varied use of it enables Hegel to subject to comic castigation a prevalent type of disguised individualism. To translate it throughout as "fact" is to disfigure Hegel's analysis. As a consequence, there is in the English version no trace of the comic spirit which so obviously pervades the original.

The literalness from which the translation suffers has robbed the *Phenomenology* of one of its most significant features. That the book professes to offer an argument for idealism can, of course, not be gainsaid, but it does so by the dialectical method, the intent of which is to render manifest, by a criticism supposedly immanent, the incongruity inherent in every type of human experience. The truth is the whole, as Hegel asserts; and the whole truth is a sort of symphony of incongruities or (according to his own violent simile) a "bacchanalian revel, where not a member is sober." A congenital illusion of perspective produces in every form of human experience an incongruous or toxic condition: it is the pretension to be a privileged or exclusive truth. In one sentence, which may serve as an abstract epitome of the whole course of the *Phenomenology*, Hegel sums up the tragi-comedy of human experience: *Jedes Moment, weil es Moment des Wesens ist, muss selbst dazu gelangen, als Wesen sich*

darzustellen. The force of this pregnant statement is not sufficiently brought out in Mr. Baillie's translation of it (on p. 379). Not that "every moment must manage to reveal itself as essential" is Hegel's thought; his meaning is rather that every moment must arrive at a representation of itself as solely essential. Drunk with its own importance, as it were, every kind of experience, from sense-perception to religion, is under the delusion of being absolute, and in this consists its inevitable folly. This folly, implicit in everything partial or partisan, is what the dialectic feeds upon. As wielded by Hegel in the *Phenomenology*, the dialectic plays a dual rôle. It seeks to show (a) that the folly of the partial masquerading as the absolute is ineluctable and (b) that such folly is the prey of the "power of negativity" and hence the very vehicle of universal reason. The idealism of the *Phenomenology* is thus constructed upon a formidable *catalogue raisonné* of the illusions of perspective that infest all human experience. As a comedy of errors, deeply conceived on a tremendous scale, Hegel's treatise may be appreciated without sharing his conviction that "Absolute Knowledge" is the sublimation of human madness. It is unfortunate that of this aspect of Hegel's undertaking the translation is so inadequate. Partly this is due, as already remarked, to attenuation of Hegel's polysynthetic language, in which the comic idea chiefly lies, and partly to a strained interpretation of Hegel's thought.

Mr. Baillie's interpretation of Hegel's thought is contained in an introduction and in short explanatory statements prefixed to most of the sections into which the treatise is divided. The introduction, recast for the new edition, is to a large extent a reproduction of an article on Hegel previously published in Hastings' *Encyclopædia of Religion and Ethics*. That article, designed to introduce readers to Hegel's system, can hardly be said to shed light on the *Phenomenology* unless its continuity with the system is initially assumed. Mr. Baillie not only assumes such continuity, but he restates the argument of the *Phenomenology* wholly in terms borrowed from Hegel's later scheme. What is characteristic of the early treatise thus becomes unduly obscured. Whence the justification for regarding it as continuous with the *Logic* and the *Encyclopædia of the Philosophical Sciences*? Hegel's works, taken as a whole, furnish material for three divergent modes of interpretation. It is quite possible to make out a plausible case that between the earlier and the later arguments of Hegel there is discontinuity: the concatenation of the ghostly categories, assumed to reproduce the *Gang der Sache selbst*, such as it appears in the *Logic*, may be sharply contrasted with the paradoxes of consciousness discerned in the *Phenomenology*, constituting, in Josiah Royce's happy phrase, a "logic of passion." And the case for continuity may be stated in two distinct ways. Mr. Baillie states it in one way, as his introduction and notes illustrate, by approaching the *Phenomenology* from the standpoint of the later panlogism. The other way is to reverse the direction and to interpret the system in the light of ideas and thoughts characteristic not only of the *Phenomenology* but of the writings anterior to it. Much has been done to trace the course of Hegel's early development since Mr. Baillie published in 1902 his own admirable essay on *The Origin and Significance of Hegel's Logic*. Dilthey's monograph on *Die Jugendgeschichte Hegels* (1905) is a formidable challenge to those who ignore the non-intellectual roots of Hegel's system. Nohl's careful edition of *Hegels theologische Jugendschriften* (1907) reveals a Hegel so much at variance with the author of the later system that the hypothesis of the continuity between the early and the subsequent products of the philosopher must either once and for

all be abandoned or else the continuity must be read in the irreversible direction from past to future. M. Jean Wahl, in his penetrating study *Le Malheur de la conscience dans la philosophie de Hegel* (1929), shows to what lengths the latter sort of continuity may be carried; the fascinating portrait of Hegel drawn by this writer is that of a fervent mystic and nostalgic romantic.

The roots of the *Phenomenology* obviously lie in earlier rather than in later thoughts, presupposing an inchoate background and not a finished foreground. Hegel himself, it is well to remember, was unacquainted with his *Logic* and his *Encyclopædia* at the time he composed his first major treatise. It must be read by itself, as a culmination of previous inspirations and not as an anticipation of subsequent insights; only thus can this great though perverse book be fully understood. A translation of it by one altogether innocent of Hegel's publications ulterior to 1807 might have recaptured the spirit of a philosophic document unique in its combination of power and puerility, sense and nonsense, sophistication and sophistry, seriousness and irony, catholicity and eccentricity, perspicuity and opaqueness, wisdom and prejudice, verve and pedantry. The present translation, though here and there giving some intimation of all this, reads very much like a pale prototype of later and less spontaneous products of Hegel's genius.

It seems ungracious to emphasise the weakness rather than the strength of Mr. Baillie's ingenious work. But the criticism urged against it is not prompted by churlishness. It is the criticism of one who is not a worshipper of Hegel's system, and who believes that the philosopher's true genius lies in the dialectical method as elaborated with incomparable freshness and freedom in his early work. A stranger to the idolatry of Hegel's later ideology can scarcely be expected to commend the apotheosis of the system. An interpretation of the imaginative and dramatic *Phenomenology* from the standpoint of the specious rigour and the spurious synthesis characteristic of the *Logic* and the *Encyclopædia* must be rejected as denuding the treatise of whatever intrinsic value it has.

J. LOEWENBERG.

S. Agostino. *A cura della Facoltà di Filosofia dell' Università Cattolica del Sacro Cuore.* Milan: Società Editrice "Vita e Pensiero". 1931. Pp. 508. Lire 50.

THIS volume, issued to commemorate the fifteen-hundredth anniversary of the death of St. Augustine, consists of papers by eighteen members of the Faculty of Philosophy of the Roman Catholic University of the Sacred Heart in Milan, preceded by the original text of the Pope's commemorative Encyclical "*Ad salutem humani generis*". The occasion was worthy of so large a volume, and the volume is in its way worthy of the occasion. Some of the papers seem a little forced (in respect of subject rather than manner), but we know that papers levied *ad hoc* rarely are contributions to knowledge. After all, eighteen teachers in one university could scarcely be expected to rise on equal wings to the celebration of St. Augustine; still less so when the university is one of the strongholds of Thomism. Had the editorial net been cast further afield, over all Italy, we might have had a monument of more than temporary value. The Italians stand nearer than the rest of us to the older Italian Fathers;

they still read them lovingly, and could have given us a truly national memorial of the Bishop of Hippo; and we should have received it with sincere respect. But it is fitter to admire than to complain, for it is certainly remarkable that a single academy has produced unaided so large and varied a tribute.

Prof. Masnovo opens the series with a sketch of Augustine's mental pilgrimage. This pilgrimage was a search not for the existence of God, for of this he was certain even in his unregenerate days, but for a true conception of His nature; and his progress was from materialism to the notion of pure spirituality, arrived at through the apprehension of the immutable and necessary character of Truth. He was already following this path when he came under the influence of Neoplatonism, which therefore accelerated rather than directed him.

The remaining papers will be best regrouped according to the affinities of their themes. In the more purely philosophical group Dr. Amerio writes a long and well documented article on Augustine's doctrine of self-consciousness. Although this is declared to be the essence of mind, as is evident in his epistemology ("si enim fallor, sum"), it is seen to need for its actualization some relation to a transcendent being, and it is on account of this need that Augustine lays down his doctrine of divine illumination. The development of this theory of self-consciousness by Campanella is then discussed. Father Galli makes a protest against the description of Augustine as a voluntarist. In declaring the inadequacy of reason for the knowledge of God he did not mean that the cognitive faculty is not involved, but that the act of faith is an act of the whole personality. This is confirmed by Prof. Olgiati, who quotes in this connection the well known Augustinian dictum, "The good is not perfectly known until it is perfectly loved". Olgiati's paper is on "The Anti-Augustinianism of Jansen". He holds that the usual ascription to Augustine of a doctrine of irresistible grace, with its corollary that man's will is not free, is due to reading Augustine through Jansenist spectacles. The *omnia possum* is as vigorously asserted by the African as by the Frenchman; and when the former adds the qualification *in eo qui me confortat* he is not limiting man's freedom but simply acknowledging his weakness. This fundamental difference of spirit—the centrality of love in the one case and of self-sufficiency in the other—makes it impossible to regard Jansenism as having any essential affinity with Augustinianism.

Prof. Padovani's article on the *Civitas Dei*, contending that in this work history is unified not by reason but by revelation, and that consequently it is wrong to speak of its author as the founder of the philosophy of history, is supported by Father Vismara's comparison of Augustine's view of history with that of Vico. For the latter history is the inevitable self-development of the spirit; true, a transcendent factor is admitted, but it is said to operate wholly by natural means. For the former, on the contrary, history is to be understood in the light of supernatural factors that erupt into it. Incidentally, the work of the one, produced in an age of turmoil, was polemical and practical, whereas the work of the other, produced in peace, was systematic and detached. Prof. Soranzo, writing on "Augustine's Vision of His Own Times," notes that the saint, despite the public duties and relationships of his whole career, rarely reveals in his writings any interest in the general happenings of his day. If, however, we supplement his rare allusions with gleanings from the *Historia adversus paganos* of Paulus Orosius (written at Augustine's request to supply the evidence of historical fact for the contentions of the *Civitas Dei*), we find

that he was a loyal admirer of the Empire, welcoming the support that the secular arm gave to the Church, and that his confidence in its providential mission was so great that he failed to appreciate both its inner decay and the strength of its barbarian adversaries. Another article on the historical content of the *Civitas Dei*, by Prof. Calderini, elicits Augustine's judgments on the leading figures and events in the history of Rome and on the relative merits of the Romans and the Greeks, concluding that his preference lies almost always with the latter (except that he abhorred their drama, praising Plato *qui poetis locum in bene morata urbe non dederit*)—a conclusion which shows that his view of the Roman state did not determine his view of the Roman people.

There are two theological articles, one on "The Causality of Efficacious Grace in the Thought of Augustine", by Dr. Pelluzza, the other on Augustine's view of the cyclic character of the world's becoming. The latter brings out Augustine's way of reconciling his denial, on the basis of revelation, of the theory of creation *ab aeterno* with his assertion that the world is eternal and yet, as created, posterior to God: the reconciliation is effected by his theory of time—that time, being determined by measure, could not be until the mutable occurred, and therefore began with the world, so that this was created not in but together with time.

Prof. Casotti, in a paper on the *De Magistro*, deals with Augustine's opinions on the methods of education. The subject naturally appealed to Augustine's practical purposes after his conversion. On the issue whether instruction should proceed by the verbal description of things or by showing the things themselves, Augustine held that the latter method should be adopted where possible. Here, by contrast with Aquinas, he undervalued the deeper quality of instruction implicit in the abstractness of words. But he realized that this issue is merely a subsidiary one: the presentation of either concepts or things is not alone education, which involves also eliciting right judgments about them, and these are secured by neither speech nor pointing but only by an inner illumination (which must come from God, the natural cognitive capacity not being adequate). This is virtually the Socratic conception of learning, theologically amplified.

The remaining papers exhibit a variety of topics. Two treat of Law. Prof. Albertario illustrates from the Augustinian writings the Christian conceptions of matrimony and possession, contrasts them with the notions of those same topics in Roman Law, and claims to show where the latter were modified by the former. Prof. Roberti gives a lengthy (60 pages) and well-annotated study of the attitude of the Fathers towards Roman Law and of the influence on the latter of Christianity, concluding with a detailed examination, topic by topic, of the juridical content of Augustine's writings. Moral theology is represented by Prof. Oddone, who considers Augustine's claim that lying is always wrong, and his controversy with Jerome on the matter. Prof. Nicodemi, charged with the obviously difficult task of writing on "Augustine and Art," finds hints of a theory of art, though it is clearly second-hand; but confines himself chiefly to noting Augustine's interest in the external decencies of worship, in the church and its furniture, and to suggesting where in his commentaries he exerted an influence on subsequent art by supplying it with subjects. Prof. Calcaterra has a rich subject in dealing with "St. Augustine in the Works of Dante and Petrarch," and writes the longest paper in the book. He insists that the frequently noticed absence of a special episode, or of any other marked form of tribute, referring to Augustine, in the Divine Comedy is not an indication of any apathy or antipathy on the part

of Dante towards him, since the poem plainly embodies many Augustinian ideas. Petrarch is overtly Augustinian in several respects—in his Platonism, in the inwardness of his Penitential Psalms and *Secretum*, in his idealization of love in the *Rime*, and in the universal function assigned to Rome in his *Africa* (one could object that the latter is rather a legacy from Virgil). The paper of Father Gemelli, the Rector of the University, is an editorial introduction. The last contribution, by Prof. Galbiati, the famous Director of the Ambrosian Library, is a note on a fourteenth-century manuscript in his charge which contains the only known mediæval translation into Italian of the *Civitas Dei*.

To examine and judge articles covering so wide a field would be nothing but a piece of presumption. Having summarized their contents I can only add my resultant impression, one of interest in and admiration for an impressive example of learned co-operation.

T. E. JESSOP.

L'Année Psychologique. Trentième Année (1929). H. Piéron, Editor.
Paris: Librairie Alcan, 1930. Pp. xviii + 936. 120 fr.

THIS issue of *L'Année*, as in the last two years, is in two parts. The contents are of the usual character, more than three-quarters of the issue being devoted to the bibliographical analysis of psychological literature which has become indispensable to the serious student of modern psychology. In addition to this, the work contains as usual a number of original memoirs, several of which are of high importance.

The first of the memoirs is by the editor, H. Piéron. It is entitled '*La dissociation des douleurs cutanées et la différenciation des conducteurs algiques*,' and its main contention is that much confusion has been introduced into the physiology and psychology of cutaneous sensation by the identification of 'prick' sensation (*la piquûre*) with 'pain'. Pain (*la douleur*) is an affective reaction or response. It has no special receptor system, as has *la piquûre*, but is associated with several cutaneous receptor systems, the receptor system for 'pinching' (*le pincement*), and that for 'burning' (*la brûlure*), as well as that for *la piquûre*. The contentions are supported by experiments on the latent times and reaction times for the different 'pains'.

In the second memoir M. Foucault discusses '*Les associations locales et la loi de fixation des images*', on the basis of experiments in serial learning with different forms of presentation and changes in order of presentation. His findings are not very new. The chief are (1) that there are individual differences of imaginal type revealed in such learning, (2) that 'local' associations play a very considerable part in the fixation of a series, and (3) that the curve of 'growth' of a series is hyperbolic.

The third paper — *Étude d'un test d'imagination sur des écoliers parisiens* — by Aase Grude Koht, is devoted to an analysis of part of the data obtained by Mme. Piéron in a test given to Parisian children in 1927-28, and already reported in *L'Année*. The part chosen for analysis is the test of imagination, which was the 'ink-blot' test. The paper is very readable, but it can hardly be said that any results of general interest emerge. The author's attention is mainly directed to the problem of sex differences, and the final conclusion on this point is that the similarity of the two sexes at the age of 12 to 15 years—which was the range of ages

investigated—is much more striking than the difference. It ought to be noted that no precise statistical methods are employed to bring out the significance of any differences found.

The next two papers are of considerable importance, though both are highly technical. In the first—*Sur la variation de l'énergie lumineuse et de l'acuité visuelle en fonction de la durée à intensité apparente constante*—G. Durup and A. Fessard record the results of a study of the part played by the time of exposure in perceptive processes in tachistoscopic experiments, with reference particularly to visual acuity. The work is a continuation, on a side problem, of work previously done by Piéron. The investigators have determined (1) the actual intensity necessary for different periods of exposure to make the exposed field apparently equal in luminosity to a constant field, (2) the shortest period of exposure necessary to give an appreciation of a duration, and (3) the visual acuity for different exposure times, the intensity being compensated in accordance with the first series of determinations.

In the following paper—*De la sommation spatiale des impressions lumineuses au niveau de la fovea*—H. Piéron gives the results of the investigation of the threshold of intensity with fields of different areas, but all falling within the foveal region, for white, green, red, and blue light, under conditions of light and dark adaptation of the eye respectively. The work, like all Piéron's, is admirable as regards technique. The results show that there is a general law of foveal stimulation which may be expressed in the form: $\log (IS) = a \log S + K$, where I is liminal intensity, and S is the area of the surface. This law seems to hold independently of the state of adaptation of the eye, and of the nature of the light. The exponent a has a value between .5 and 1, and the value .7 is most satisfactory. This gives a value of K as equal to $IS^{-.3}$.

The sixth paper by Renée Leurquin describes a comparative study of various tests of motor ability. The tests employed were: Vermeylen's intelligence test, two Link tests of rapidity of movement, two steadiness tests, and a tapping test with Morse key. The reliability of the various tests and their correlation with mental age were calculated. The reliability coefficient was found to vary between .558 and .969 for the different tests, the highest being obtained in the tapping test. None of the tests showed any significant correlation with mental age, which would seem to show that motor ability is entirely independent of intelligence. Correlations were also worked out of the motor tests with one another. The highest correlation was found between the two Link tests. The correlation between the two steadiness tests was also high. There was no significant correlation between the tapping test and any of the other tests. The inference would appear to be that in the tapping test we are testing an entirely different ability from that tested in the other motor tests. The paper is interesting and valuable.

Both the other papers are devoted to the description of experiments in learning, and very similar experiments. The first of these—*Contributions à l'étude de l'apprentissage*—by Dora Heller-Kowarski and Marcel François, describes a learning experiment extending over fifty days, in which the subject—only one subject was used—worked for five minutes in the morning and five minutes in the evening each day. The work was cancellation as in the cancellation test of Toulouse and Piéron. The main result of interest obtained was that the morning work was consistently better than the evening work except during the first few days. The authors offer the ingenious explanation that the practice gain for each day diminishes

with increasing practice, while the fatigue effect interfering with the efficiency of the evening work is constant or approximately so. Hence the fatigue effect in the evening work is at first balanced by the practice gain, but fails to be balanced as time goes on.

The second investigation—*Une expérience sur l'apprentissage dans le test de barrage*—by A. Chweitzer, was also one in which cancellation was employed. It differed, however, in several respects from the last. Ten subjects were used in place of one, the work was carried on for 15 minutes each day, a signal was given at the end of each minute, the subjects recording the exact place they had reached when the signal was given, and the accuracy of the work was taken into account as well as the speed. It cannot be said that this investigation brought out anything not previously known, but the close similarity of the learning curves obtained in the two experiments is worthy of note.

Three short 'Notes' are added, the first, *Note sur les corrélations existant entre perceptions tachistoscopiques de différents matériels*, by E. Tchang and M. M. Chang, the second, *La loi de Bunsen-Roscoe et le réglage des éclaircissements*, by H. Piéron, which is a reply to Selig Hecht, and the third, an account of the Sixth International Congress of Psychotechnics by J. M. Lahy.

JAMES DREVER.

L'Introduction des Théories de Newton en France au XVIII^e Siècle.
Vol. I, Avant 1738. By PIERRE BRUNET, Professeur de l'Université.
Paris: Albert Blanchard. 1931. Pp. vii, 355. 55 frs.

DR. BRUNET, whose two-volume study of Maupertuis has quickly taken rank as a standard work, has now given us another volume that should be placed in every academic library. It is, however, of far less philosophical interest than the earlier work, being a detailed account of a long drawn out domestic controversy among physicists, a chapter in the history of a science, whereas in Maupertuis we have a thinker who crowned his science with a philosophy. Hence, despite its importance, only a relatively short review is required.

The book is a history less of Newtonianism in France than of the resistance to it there, or rather it is a history of the former through the latter. By the time of Newton Cartesianism was thoroughly established in France, and all the physicists expressed themselves in terms of Descartes' mechanics of vortices. The work of Newton (quickly known in those days of a single language of learning), deliberately avoiding metaphysics, and at some points directed, in so far as it had a polemical purpose, against the Cartesian mechanics, aroused immediate and extremely strong opposition. For Newton dismissed the notion of a vortex as not only without empirical foundation but also as entirely incompatible with Kepler's generalised accepted laws of planetary motion and with the behaviour of comets. He also rejected the *horror vacui* which Cartesianism inherited from Aristotle and the Peripatetic Schoolmen, and substituted for the Cartesian "impulsion" the notion of attraction or gravitation. Voltaire summarised the contrast between the two systems with characteristic simplicity: "A Frenchman who comes to London finds things different in philosophy as in everything else. He left the world a plenum, he now finds it a vacuum. In Paris the universe is looked at as consisting of vortices of subtle matter; in London nothing of the sort is seen. With us it is the pressure of the

moon that causes the tides ; among the English it is the sea gravitating towards the moon. . . . Among you Cartesians everything happens through a scarcely intelligible impulsion ; with Mr. Newton through a no better understood attraction. In Paris you imagine the earth as shaped like a melon ; in London it is flattened at both ends. Light for a Cartesian is in the air ; for Newton it comes from the sun in six and a half minutes."

These oppositions were too thorough and deep to bring about an easy acceptance of Newton. Prof. Brunet admits that the spirit of sheer conservatism entered, and also proud patriotism ; but the following sentence from the *Éloge de Saurin* by Fontenelle, secretary to the Académie des Sciences, although expressing the patriotic motive, brings out a more distinctive and more justifiable motive : "Could one have believed it would ever be necessary to pray heaven to deliver from too great a prejudice for a system both unintelligible and alien, a nation with so strong a love of clarity and charged with having no taste for whatever is not its own ?" The foundation of the French resistance, this suggests, was the awareness of the Cartesian physics as depending from a rational philosophy, as a set of logical deductions from first principles honestly supposed to be self-evident ; while the Newtonian physics was regarded as nothing more than an attempt to state the laws of fact, with no inner drive to make those laws intelligible. It was the old conflict of rationalism and empiricism in the scientific sphere, or at any rate a conflict between a philosophical science and a science that preferred to be no more than a science.

Despite the vehemence of their resistance, the French savants were not blind to Newton's excellences. Their very vehemence was a recognition of his power ; the Académie des Sciences made him a foreign associate as soon as their regulations allowed ; Fontenelle's *Éloge de Newton*, with all its reservations, was a real tribute ; his *Optics* at least was received with appreciation ; and many details of his work were isolated, taken over, and ingeniously assimilated to the Cartesian scheme. As the infiltrations increased, the modifications and complications required to assimilate them also increased, and gradually the Cartesian scheme became intolerably unstable. By contrast the Newtonian scheme, as earlier the Copernican heliocentric rings over against the Ptolemaic maze of epicycles upon epicycles, remained in increasingly evident simplicity. The issues were still contested, but with more and more embarrassment on the Cartesian side. The growing influence of Dutch scientists in France, notably of 's Gravesande, fell to the favour of Newton ; then Maupertuis, in his *Discours sur la Figure des Astres* (1732), placed himself on the side of Newton ; and finally Voltaire, doing for the general reading public what Maupertuis had done for the savants, expounded and defended Newtonianism in his *Lettres sur les Anglais* (1733). Maupertuis was looked at askance, and Voltaire's *Lettres* was condemned by Parliament, seized and burned ; but the success of the newer physics was plainly drawing near.

Dr. Brunet closes this first volume with the year 1738, the eve of the publication of Voltaire's *Éléments de la Philosophie de Newton*. The next volume will be looked for with interest. If like the first it recounts all the sinuities of the controversy, all the skirmishes on points of detail, I hope it will be made useful to the philosophical student by being given a final chapter in which the controversy is exhibited comprehensively as one between two conceptions of philosophical presupposition and scientific method.

T. E. JESSOP.

The Works of Aristotle translated into English: de Anima. By J. A. SMITH.
Oxford: Clarendon Press, 1931. 10s.

THE writer of this notice desires to offer his humble apologies for its late appearance, and his belated congratulations to the University Press and the editors and collaborators of the Oxford translation of Aristotle upon the appearance of this concluding instalment of the great work. (Though he still deeply regrets the exclusion from the original scheme of the often very important fragments of the lost Aristotelian works: presumably it would be in vain to hope for the subsequent issue of a supplementary volume.) Detailed criticism of Professor J. A. Smith's version of the *de Anima* would, in any case, be something of an impertinence, in view of the known eminence of the translator as a classical and Aristotelian scholar; and even were it not so, the present reviewer could find very little to say. After a careful comparison of the translation line by line with various texts of the original work, it is only in a few places that he has felt himself doubting about the reading adopted, or the precise tone given to a phrase in the rendering, and in all these cases he has been only too conscious that if he found himself inclined to dissent from Professor Smith, the reason is probably to be sought in his own inferior scholarship and knowledge of the whole history of the interpretation of the text. It might, perhaps, be just noted in passing that Professor Smith is among those of the translators who lean to the minimum of generosity to the reader in the way of providing him with indications of the grounds upon which they have adopted a reading or a translation. In view of the uncertainty of both text and rendering in some of the more enigmatic deliverances of Aristotle in the *de Anima*, and the enormous superstructure subsequently built upon these dubious foundations by later philosophers, one would sometimes have been grateful to Mr. Smith for a little more help in the way of annotation. However, he has on principle leaned to the side of parsimony; it is only very rarely that we are ever told whether a reading adopted is due to his own conjectures, or derived from some other source, and, what is stranger, we never learn what text is assumed as the general basis of the version. It is hard not to think that this austerity has been carried a little too far in the case of the brief and perplexing utterances of Bk. III. on the subject of the *intellectus agens*. But after all the translator should know his own business best, and all students of the Aristotelian doctrine of the soul will certainly owe him a deep debt for his accurate and dignified version of a difficult text; perhaps he is right, just because such divergent interpretations are often possible, to avoid the function of the expositor with such extreme care.

A. E. T.

Morals and Western Religion: A Discussion in Seven Dialogues. By JOHN LAIRD. London: Edward Arnold & Co., 1931. Pp. viii, 232. 7s. 6d. net.

LIKE all Prof. Laird's work, this book is lucidly and gracefully written. It is also somewhat intriguing, not only by reason of its dialogue form (which one is glad to see growing in vogue, and which, when adroitly handled, always adds to the charm of a discussion), but also because of its curious setting, to which no key is provided. Why should 'Miss Penelope Cochran' report to 'Sir Magnus Reid' (of a Banffshire castle) the discussions

on ethics and religion held by eight philosophers after an International Congress at Oklahoma (Harvard?)? And why should they go to Johnson (Berkeley?) University to do this, unless it is that California still believes in philosophy, and that the philosophers want to show that they can talk all over its beauty spots? But one has an uneasy feeling that one is failing to apprehend some over-subtle Scottish joke. The other *dramatis persone* are mostly Scotch also, to wit, 'David Wilson,' Professor of Logic and Metaphysics in Canberra University, 'D. J. Munro,' Professor of Moral Philosophy in Leuchars University, 'P. R. Duff,' an 'axiologist' and editor of the *Journal of Metaphysics*, 'J. L. Fixley,' an 'Oxbridge' don, and the Rev. Dr. 'Elder Bowie,' a theologian from a Nova-Scotian seminary. There are also two ladies, one, 'Miss Gotto,' a vigorous and slangy Platonist, and a regular *habituée* of philosophical congresses, the other, a 'Mrs. Hacopian,' who is "partly Greek and partly German," and so doubly qualified to speak up on behalf of a more Hegelian 'idealism'. Also, until she married an Armenian, she was an Associate Professor of Philosophy and Psychology in a Pennsylvania College. All these personages submit to the chairmanship of an American, 'Wilbur B. Haslett,' 'Dean of Deans' in the local University, and roam discursively about the landscape, both spiritual and geographical, in great style. Both they and their creator evidently enjoy the fun prodigiously, but I am somewhat at a loss to say what is the outcome of their discussions. The nearest approach to a conclusion, perhaps, is to be found in Dr. Bowie's last word, when he says that his faith in theological orthodoxy is unshaken. To which Prof. Wilson appears to retort, with even robust faith, that there will always be professors of philosophy. Perhaps Prof. Laird was only trying to show how cannily he can discuss what were once hanging matters in his country!

F. C. S. SCHILLER.

Adventures in Philosophy and Religion. By JAMES BISSETT PRATT. New York: The Macmillan Co., 1931. Pp. xi, 263. 8s. 6d.

LIKE Prof. Laird, Prof. Pratt also has betaken himself to the dialogue form, as he says in a "spirit of good-humoured fun," but (as he admits) with the serious purpose also of vindicating "the reality of the psychical and of the self". Indeed, his book appears to be, very definitely, not play but propaganda. It is made up of five parts. The first, and much the longest, is called 'Socrates's Adventures in Wonderland, or the Damning of Dualism'; the second is 'Religion Up to Date, or Mr. Layman's Adventures in the New Theology'; the third is 'Adventures on this Side and on the Other, or Who pays for the Beers'; the fourth is 'In a Chinese Temple, or Monk, Missionary and Promoter'; while the last, called 'Gotama and His Misinterpreters, A Long-lost Buddhist Sutta,' is a plea for identifying the teaching of Gotama with that of Jesus, and ascribing to it a real and eternal self.

In the first dialogue, Socrates, who comes up from Hades, *via* a cave in the Areopagus, encounters a representative band of modern philosophers, a pragmatist (Dewey), a neo-realist, a new realist (G. E. Moore), a 'Mr. Try-everything-once' (Earl Russell), a behaviourist, an idealist (Bosanquet), and a sentimentalist, his daughter, and worsts them in succession. He has become tolerant of long speeches (being indeed addicted to them himself), and makes no attempt to express himself in Hellenic *façons de parler*, but

talks good American. His opponents talk a good deal of nonsense, the authentication of which is made difficult to verify by the omission (as a rule) of exact references for the more extreme statements put into their mouths. This annoying practice is defended in the Preface, p. vi. Quite inadequately; for if Prof. Pratt could find room to print the books on which his "paraphrases" were based at the bottom of his page, he might just as well have made his references exact. One also feels that the literary effect of Socrates's criticism would have been greater, if he had not tried to make so many points, but had concentrated on the real knock-outs, and led up to them more gradually. Whether it was wise to start off with so technical a subject as this indirect defence of 'dualism' may also be doubted.

The later dialogues are lighter reading. The characters in the second are an intelligent layman, an Anglo-Catholic priest, an 'advanced' Humanist, in the religious sense in which it is American for Positivist, a professor of the science of religion and a social worker, a popular writer, and a quaker, who turns out to be a mystic. In the end, the layman refuses to renounce his belief in God, and in human selves and values. The third dialogue, which we may charitably suppose to have been written before the Eighteenth Amendment to the American Constitution was enacted, deals with the discomfiture of an idealist, a materialist, a behaviourist, a neo-realist, and a Fichtean when they find themselves in the future life which they had all declared to be impossible. The *dramatis personæ* of the fourth dialogue are two American missionaries in China, one an old-fashioned fundamentalist (who knows Chinese), the other a liberal, who is disposed to fraternise with Buddhism, but whose Chinese is not so good, two Buddhist monks, one old and wise, the other young and ignorant, and an American business man, whose creed is that "trade follows the Bible," and whose apocalyptic vision is of "400,000,000 people buying American gum and chewing it". It will be seen that Prof. Pratt provides his readers with varied fare!

F. C. S. SCHILLER.

Une nouvelle philosophie de l'immanence : Exposé et critique de ses postulats.

By A. KRZESINSKI, Professeur agrégé at Cracow. Paris: Alcan, 1931.
Pp. 134. 25 fr.

THE two forms of "immanentisme" discussed in this book are (1) Solipsism—stated, rather surprisingly (p. 7), to have been created by W. Schuppe in his *Erkenntnistheoretische Logik* (1878), although, e.g., the theory (designated "egomisme") was discussed by the Chevalier Ramsay and by others in the early eighteenth century—and (2) the "immanentisme général," principally of Rickert in his *Der Gegenstand der Erkenntnis* (1892). The book itself is a very confident polemic against these two positions.

The author's method is to extract the "postulates" of Schuppe (and of Schubert-Soldern) in their "solipsism"; and again of Rickert in his "immanentisme" (in the latter instance quoting at considerable length), to demolish the said postulates, and after a statement of and reply to 'objections' (pp. 98-120), to proclaim a very triumphant conclusion. In my judgment his account of these postulates is just, or at least not unjust, although it is brief; and many of his criticisms are trenchant. (In par-

ticular, I think, he does show a contradiction in Rickert's theory of "value," viz., that the (logical) values which, according to Rickert, we "acknowledge" are, on Rickert's own showing, "transcendent" in nearly all the important senses of that term (*cf.* the quotation from Rickert, p. 105 n.), and yet that Rickert's final criterion is a "constraint" that is ultimately subjective.) On the other hand I cannot see that this author gives any reasons for his own position. He seems content with counter-assertions despite the parade of meeting "objections" (in 11 pages); and I do not find his doctrine intelligible. On page 44 he states that thought "*peut saisir*" equally well what is "in" thought and what is "outside" thought and yet that what is outside thought can be prehended *only* by an intermediary which is an "image ou contenu"; and he seems to me to deprive his own polemic of all intelligibility when he says (p. 114 n.) that "strictly" a "transcendent" being is an "essence profonde" that is never directly prehended and that what we do apprehend is "immanent" because it is superficial or else an "action" of the real. On the other hand, Mr. Krzesinski's argument has an orderly impact that is not unimpressive.

JOHN LAIRD.

Prolegomena to a New Metaphysic. By THOMAS WHITTAKER. Cambridge: University Press, 1931. Pp. 120. 5s. net.

MR. WHITTAKER never allowed his strenuous and important studies in Neo-Platonism to retain a merely antiquarian flavour, but, on the contrary, "attempted successive modifications of the ancient Neo-Platonism as an aid to ontological speculation" (p. 60). He now finds in the work of Eddington and of Jeans (particularly the latter) a welcome confirmation of the view that pre-mundane Ideas, largely of a mathematical cast, pre-figure and (when actualised) *become* ontological reality. "To produce popular effect, what the modern idealistic criticism needed was some confirmation from a process within physical science itself. This has not come till our own time, but it has come with surprising effectiveness" (p. 44).

The present essay develops this theme in about 20,000 words, and, in the constructive part of it, 'deals distinctively with the problem of the Many', particularly with the individuality of minds and with the teleology of minds and of organisms. Mr. Whittaker does not like the indeterminism affected by the new physics. The "freedom of the individual," he says (p. 96), "consists in its *aseitas*, not in the absence of necessity"; and he is sceptical concerning the inferences drawn from the Second Law of Thermodynamics; but he likes the finitism of the new theories—with reservations. "The number of all singly numerable things and events, present and past, is finite," he says (p. 61), although the future may be infinite and the universe immortal (p. 66). For the Neo-Platonists said so.

In Mr. Whittaker's general argument the terms "part of experience" and "what is potentially capable of an expression in consciousness" appear to be regarded as equivalent (p. 40); and it is not clear to me why the *aseitas* of life and of mind are asserted together (*e.g.*, p. 86 n.) when a unitary vital force is denied (p. 71), although the necessity for a unitary consciousness is asserted (p. 83). It is to be hoped that the statements that Kant had "solved" the problem of the relation of logic to sense in mathematics (p. 31) and that Mill had "solved the problem of inductive

logic" (p. 34) will, in some sequel to these Prolegomena, be defended against the very specific criticisms with which we are all familiar. "Guidano" Bruno on page 56 is an unfortunate misprint.

JOHN LAIRD.

Philosophy and Civilization. By JOHN DEWEY. New York: Minton Balch & Co., 1931. Pp. vii, 334. \$5.00.

WITH a single exception the eighteen articles which make up this volume have all appeared in print before, and without exception they read like contributions to the more ponderous organs of technical philosophy. This is not to say that they are not worth reading, for no one who ever read Prof. Dewey will feel that anything he has written can safely be missed. So I have no doubt that we shall all be grateful to him for collecting these essays in a more convenient form. Nevertheless one feels that while he was about it he could so easily and so greatly have enhanced our gratitude, with very little trouble to himself, by adding a few notes, dates, and references to the contexts in which his thought developed. As it is one cannot tell. Some of his essays are quite recent, others appear to go back thirty years or more. Only one of them is definitely dated; in the rest it is left to conjecture to what date the term 'recent' (which occurs not infrequently) may refer. By this omission Prof. Dewey has not only made (no doubt congenial) work for future historians of philosophy, who will look up the files, for the last thirty years, of the *Journal of Philosophy*, the *Monist*, the *Philosophical Review*, and the *Psychological Review*, but has made the understanding of his thought by the ordinary reader appreciably more difficult.

I find myself at a loss to suggest a reason for this erasure of the dates. For Prof. Dewey appears to have made no other changes in his essays and to have left in words like 'recent,' and even, occasionally, references to the original paging of his article (e.g., p. 232 note). And he of all men can least be suspected of the traditional pose of philosophers that the truths they announce are eternal and immutable, and of their consequent habit of covering up their tracks and concealing the ways by which they reached their doctrines, a habit which has added so greatly to the difficulty of understanding philosophies. For have we not learnt from Prof. Dewey himself that human thinking is always provoked by the stimulus of a problem, and that therefore every thought is really intelligible only in the context of the question which it essayed to answer? A little elucidation of the situations, therefore, which moved him to take up his pen, would have rendered Prof. Dewey's book much more instructive and effective; and as this volume by no means contains all (or even the most important) of his contributions to philosophic periodicals, a timely complaint may have the happy pragmatic consequence that in his next volume the vital dates will be supplied.

F. C. S. SCHILLER.

Osiris: A Study in Myths, Mysteries and Religion. By Harold P. Cooke. London: The C. W. Daniel Co., 1931. Pp. 169. 5s.

It is not quite easy to detect the real purpose of this learned book. On the surface it appears to be nothing more than a discussion of Plutarch's

account of the primitive, childish, and somewhat unsavoury myths about Isis, Osiris and Typhon, which bulk so largely in the religion of the ancient Egyptians. It is probable enough that in the course of the 4000 years during which that religion flourished a good many adventitious meanings were read into these myths, but Mr. Cooke hardly attempts to show that these were either rational in themselves or exclusive of each other. His own leaning is towards the astronomical interpretation, and he regards Osiris as originally the sun and Isis as the moon; so he is disposed to quarrel, not very violently, with Sir James Frazer and what Andrew Lang wittily called the Covent Garden School of anthropology, which makes Osiris, like Adonis, a vegetation god, scorched by the summer heats. But one can see no reason why *both* of these interpretations should not have been believed, even simultaneously. For it has now become pretty plain that in its beginnings agriculture was closely allied to astronomy, the science which was striving to determine for its benefit the length of the year, by empirical observation. So the same god might well be regarded at one and the same time as both the hero of a vegetation-cycle and the lord of the day and the year, as well as being the king of the dead and the initiator of a higher (agri-) culture. Theologians have always been expert in both eating their cake and having it, though not perhaps to the logical advantage of their science.

F. C. S. SCHILLER.

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- O. C. de C. Ellis, *A History of Fire and Flame*, London, Simpkin, Marshall Ltd., 1932, pp. xxiv + 436, 15s.

VII.—PHILOSOPHICAL PERIODICALS.

JOURNAL OF PHILOSOPHY. xxviii. 14. **A. Ambrose.** 'A Critical Discussion of *Mind and the World Order*.' [Appreciative, but finds difficulties in C. I. Lewis's attempt to reconcile pragmatism and the *a priori*.] xxviii. 15. **T. T. Lafferty.** 'The Dualism of Means and Value.' [Mainly a discussion of A. O. Lovejoy's *Revolt against Dualism* in order to suggest "some possibility of continuing the revolt".] xxviii. 16. **E. B. McGilvary.** 'Dialectical Arguments against Relative Simultaneity.' [Defends Einstein against Lovejoy's criticisms, accusing the latter of "an amazing mis-handling of quotations and an ignorance of quotation marks and of context, with the result that the positions taken by the interlocutors in Einstein's brief dialogue are completely interchanged," and of failing "to compare the popular version with the technical presentation in the *Electrodynamics*".] **J. M. Matthews.** 'A Note on the Time-Retarding Journey.' [Declares that the paradox is largely manufactured by departing from all the empirical conditions of determining the motions alleged, and that a speedometer would be much more useful than a 'clock' under the circumstances.] xxviii. 17. **R. B. Perry.** 'A Theory of Value Defended.' [A vigorous reply to the criticisms of his *General Theory of Value*, which objected to his defining value in terms of interest.] **A. T. Rubinstein.** 'Disinterestedness as Ideal and as Technique.' [Posits disinterestedness as the ideal of the philosophies which have recognised "the inevitable defeat of the ideal by the real," as illustrated by Plato, Epicurus, Spinoza, Schopenhauer and Santayana, and then proceeds to show that Lippmann's *Preface to Morals*, though it professes to draw its inspiration from Santayana, does not use the word in the same way.] xxviii. 18. **R. B. Perry.** 'Value as an Objective Predicate.' [Replies to the criticisms of Miss M. E. Clarke and Prof. Laird.] **I. Knox.** 'Beauty and Art.' [Concludes that "there is an element of beauty in all good and great art, better felt than defined. But art is not good and great because it is beautiful; it is beautiful because it is good and great."] xxviii. 19. **C. de Boer.** 'Sceptical Notes on the Sense-Datum.' [A somewhat involved criticism of realistic doctrines of sensa, followed by a constructive theory which takes a percept as "a construction which intends the object".] **R. B. Perry.** 'Value as Simply Value.' [Proceeds to criticise his critics, Prof. Laird and Miss M. E. Clarke, and the theory that value is indefinable.] xxviii. 20. **H. T. Saglio.** 'Implications of *The Life of Reason*.' [Appreciative exposition of Santayana, which does not, however, conceal the logical difficulties in which he involves himself. Though a philosopher, and "not merely a literateur", he ends in "an untenable metaphysics", which has been "a keen disappointment" to his admirers.] **G. Boas and A. E. Blumberg.** 'Some Remarks in Defence of the Operational Theory of Meaning.' [Discusses (1) "what types of assertions are operationally meaningless," (2) whether the theory offers a criterion of meaning or states also its content. As to (1) it should be noted that meaningful operations must be performable and empirically verifiable, and that to be false an operation must be meaningless. "Assertions whose verification is *theoretically* as well as *practically* impossible" alone are meaningless,

especially when no operations have been suggested to define their meaning. As to (2), "criterion and content cannot be separated". Also "the same object can be inferred from different sets of operations".] xxviii.

21. **R. S. Lillie.** 'Types of Physical Determination and the Activities of Living Organisms.' [Suggests "the existence of two distinct types of physical determination in nature. One of these is internally directed, issuing toward or into the numerous spatially discrete local regions or focal points which appear to science as atoms or electrons. . . . The other, externally directed, is dependent on the transfer of quanta between such foci and exhibits itself ultimately in the physical causation of everyday experience."]

G. W. Beiswanger. 'Artist, Philosopher, and the Ideal Society.' [Compares the ideals of Plato in the *Republic* and Romain Rolland in *Jean Christophe*, as exemplifying respectively the ideal of the philosopher and of the artist.] xxviii.

22. **C. V. Tower.** 'Neutralism and Radical Empiricism.' [James's Radical Empiricism struck a deadly blow at idealism by alleging the 'neutrality' of the 'experience' concept. But 'neutrality' is not a passive term, and means neutrality towards or against. Hence "we may entertain the thought that a reconstructed neutrality concept might substitute for the present asymmetry of methodological values a recognised polarity of relational frames of reference, and place in altered perspectives both idealism and the philosophies of pluralism that have followed the one-way street to the limit".] **S. E. Mezes.** 'Our Conscious States picture and apprehend our Nervous Processes.' [As "all our theories of the interrelation of mind and matter are more or less unsatisfactory," the 'hypothesis' is presented that "our conscious states, our feeling, thinking, and willing, picture and apprehend, have a vague and blurred but serviceable knowledge of our nervous processes . . . consciousness 'sees' nerve impulses much as the impressionist sees field and forest".]

PROCEEDINGS OF THE ARISTOTELIAN SOCIETY, 1930-31. N.S., vol. xxxi.
Beatrice Edgell. Presidential Address: 'Images.' [The author first states two theories of imagery—the trace theory and the theory of the persistence of impressions in the unconscious—and then points out the difficulties in each theory which are suggested by recent work in psychology and physiology. The remainder of the paper aims at indicating in a constructive way "the direction in which the writer believes psychological theory to be moving", but the indications given are rather vague. The main point seems to be that stress is to be laid rather on the function which the image discharges than on the revival of identical elements.] **F. C. S. Schiller.** 'Creation, Emergence, Novelty.' [After remarking on the usage of the words evolution, creation, and emergence, Schiller maintains that the all-important question is, What is the place and significance of novelty in the world?] **A. H. Hannay.** 'Morality in Art.' [Some kinds of art, e.g. satire, may involve moral judgment as an element, and all art is an expression of values in human experience.] **C. E. M. Joad.** 'Modern Science and Religion.' [The first and longer part of the paper criticises the view attributed to modern physicists like Eddington and Jeans, that the worlds of science and of sensory experience are phenomenal, and that the noumenal reality is a mental world to which our own minds give us the clue. The second part of the paper contends briefly that the worlds of sense, of science, and of value (aesthetic, moral and religious experience) are alike real though diverse; "reality . . . is plural, it contains a number of different spheres or realms".] **R. Knight.**

'Mr. Schiller v. Non-Pragmatist Logic.' [A polemical criticism of Schiller, in which the writer makes no attempt to place himself at Schiller's point of view.] **W. D. Lamont.** 'On the "Moral" Argument for God's Existence.' [A clearly written criticism of the arguments by which Martineau and Green infer the existence of a morally perfect Being from the facts respectively of moral obligation and moral development. But these writers would probably not have accepted the interpretation put upon their arguments.] **J. Macmurray.** 'The Conception of Society.' [Argues against the substantialist conception of society as a group entity and in favour of the adjectival conception of it as "a characteristic quality of human experience which is realised in the intercourse of human beings". This sharp antithesis leads the writer to disparage the State (which is a group entity) as being "merely a mechanism and therefore a means to an end", "its value is an economic value".] **Helen Knight.** 'Sense-Form in Pictorial Art.' [By sense-form the writer means "the area composed of coloured shapes which we see when we look at a picture". The paper first discusses in a very interesting way the relation between the sense-form and the representative (or 'imitative') character of a picture; and then analyses the psychological effect of sense-form.] **J. S. Mackenzie.** 'Conflicts in Valuations.' [The paper begins with a brief examination of the conceptions of Good and Value, and then discusses Nietzsche's idea of a radical transvaluation of values by way of introduction to the question of the basis of our ultimate valuations. It is suggested that this basis involves the assumption of some underlying plan of human, or even cosmic, evolution, within which different valuations find their place and their correction.] **G. Dawes Hicks.** 'On the so-called Fusion or Blending of Presentations.' [A valuable paper which examines critically the notion of fusion or blending as used in psychology, whether with reference to heterogeneous or homogeneous contents.] **M. Ginsberg.** 'The Concept of Evolution in Sociology.' [The first part of the paper discusses criticisms that have recently been directed against the use of the conception of evolution in sociology; the second part deals with the conception itself.] **N. Isaacs.** 'Psycho-logic.' [The title of the paper is adopted to suggest the author's contention that "logic needs to be based on psychology through and through". But what he means seems rather to be that logic should be based on the actual procedure of successful science, a procedure which is regarded as primarily inductive and tentative, and is sharply contrasted with the traditional deductive logic. This latter is criticised on grounds similar to those which Schiller is always urging, but Isaacs is not a pragmatist; his position connects rather with Mill, whose *Logic*, in his opinion, "contains surprisingly much of the gist of the matter". The paper is too long for a full summary.] **A. E. Heath.** 'Some Notes on Methodology in the Social Sciences.' [Suggestions as to the causes of the relatively backward state of the social sciences.] An 'In Memoriam' notice of the late Professor Wildon Carr is contributed by Miss Oakeley, in which she gives a sympathetic account of the main philosophical ideas by which his work as writer and teacher in his later years was animated.

ARISTOTELIAN SOCIETY, SUPPLEMENTARY VOLUME X., 1931: INDETERMINISM, FORMALISM, AND VALUE. **A. C. Ewing, F. C. S. Schiller, C. A. Mace, R. Knight.** Symposium: 'The Nature and Validity of Formal Logic'. [Ewing states and answers what he takes to be Schiller's chief criticisms on formal logic, and in doing so is at pains to be as conciliatory

as possible. Schiller expresses a desire to emulate the spirit of the opening paper, but his good resolutions affect only the manner of his reply, not the matter of it, for on the main issue he simply reiterates his contention that form is a purely verbal affair. Mace reinforces the defence of logical form by taking a concrete example of the reasoning process and showing that formal relations of implication are essential to the process; he also deals with questions about ambiguity and logical necessity. The discussion between Schiller and Knight is almost wholly of a polemical character.] **H. J. Paton, W. D. Ross, J. L. Stocks.** Symposium: 'The Coherence Theory of Goodness'. [Paton's paper gives a clear summary of the coherence theory. His critics are on the whole agreed against him; Ross rejects the coherence theory even as regards truth, Stocks thinks that the analogy with the theory of goodness does not hold, while both think that the coherence theory presupposes some independent rightness or goodness.] **J. Laird, G. Dawes Hicks, W. G. de Burgh.** Symposium: 'Actuality and Value'. [The subject of this symposium was suggested, it seems, by the Gifford Lectures of A. E. Taylor, but in the opening paper it is practically narrowed down to the argument of chap. ii. of vol. i., upon which a series of somewhat external criticisms are passed. The other contributors to the symposium protest against this limitation of the discussion, but allow their own contributions to be determined by it, although they endeavour to do more justice to Taylor's general view as well as to the arguments of the special chapter. Thus while there are points of interest in the discussion, it is as a whole rather disappointing.] **C. D. Broad, A. S. Eddington, R. B. Braithwaite.** Symposium: 'Indeterminacy and Indeterminism'. [Broad first formulates a complex set of assumptions on which he holds determinism to depend, secondly concludes that determinism is not to be taken as axiomatic even in physical science, and still less in psychology, and thirdly inquires how far the indeterminacy now recognised in physics affords empirical confirmation of the non-axiomatic character of determinism. Eddington accepts Broad's abstract argument, but suggests that it is hardly needed in view of the fact that "a non-deterministic scheme of physical equations is actually in use". He emphasises strongly the point that the indeterminacy is not an exceptional feature but enters in some degree into every phenomenon, and he then proceeds to explain the meaning of indeterminacy in relation to predictability and inference. Owing to Braithwaite's 'disbelief in causation' his paper goes off on a line of its own. The discussion is interesting, more especially Eddington's paper, but is not likely to satisfy the philosopher who is not expert in physics or to afford him the kind of enlightenment which he wants from the physicist.]

REVUE NÉO-SCOLASTIQUE DE PHILOSOPHIE. xxxiii^e Année. Deuxième série, No. 31. Août, 1931. **A. Fauville.** *Les études expérimentales de l'apprentissage.* [Describes the older experiments of Thorndike and the later ones of Köhler and Lashley on the process of learning in animals. The later experiments show that the brain functions as a single organ, and that the facts cannot be accounted for by a theory of "conditioned reflexes".] **H. Gouhier.** *Programme pour une étude historique du positivisme.* [Through Saint-Simon there is a real continuity between Comte's religion of humanity and the various substitutes for Christianity dreamed of in the period of the French Revolution. There is no breach of continuity between the positivist philosophy and the positivist religion of humanity. But while the cult of the *Être suprême* was a mere imitation

of the external cults of Christianity, Comte, under the influence of his devotion to Clotilde de Vaux, imperfectly rediscovered its spirit. The 'religion of humanity' is charity without faith.] **P. Henry.** *La liberté chez Plotin (concl.)*. [The conclusion of the whole matter is that, in view of his strict insistence on divine transcendence, Plotinus can ascribe to God the "freedom" of which He is the source in us only *eminenter*, not *formaliter*. The discussion of the divine freedom in *Enn.* VI. 8, is silent on the question whether *creation* is a free act, and elsewhere it is taught that the One necessarily produces the world. Hence we are not entitled to deny the pantheism of Plotinus, without further examination, on the strength of his assertion of human or divine freedom.] **N. Balthasar.** *Le problème de Dieu d'après M. Édouard le Roy*. [Deals with the criticism of the Thomistic "five ways" in Le Roy's *Problème de Dieu*, in connection with the rejoinders of J. Maréchal, and argues that there is a want of philosophical self-consistency in Le Roy's position which invalidates all his objections.] **A. Mansion.** *Autour des Éthiques attribuées à Aristote (cont.)*. [Deals mainly with the work of R. Walzer on the *Magna Moralia*, which is regarded as having sufficiently established the conclusion that *M.M.* is the composition of an *épigone* slightly posterior to Theophrastus.] **A. de Ivanka.** *La Connaissance intuitive chez Kant et chez Aristote*. [The beginning of a comparative study justified by the consideration that Aristotle and Kant are agreed on the radical disparity of sense and thought, and hence the problem of a possible "intuitive understanding" has a special significance for both of them. The present article is a conspectus of Kant's views as found in the *K.d.r.V.* and the *K.d.U.*] Book reviews, etc.

No. 32, Novembre, 1931. **L. Noël.** *La méthode du réalisme*. [Is a critical realism possible? Gilson thinks not; realism is an initial postulate for the philosopher which neither requires nor permits of epistemological justification. N. argues against this that the realism of neo-scholasticism demands no more than that the "being" which is the object of knowledge shall be "independent of the actual knowledge conscious subjects can have of it". Now such independence can be verified by reflection upon our knowledge of the sensible datum, a knowledge which is not itself simply sensation, but a human and intelligible knowledge.] **C. Ranwez.** *La théorie du symbolisme moral de la beauté d'après la "Critique du jugement"*. [Kant has been accused of moralising æsthetic appreciation of beauty in a way which is contradictory of the initial presuppositions of his own æsthetic theory. More careful examination of his text will show that the charge is unfounded. He is consistent throughout to his initial distinction between the ethical and the æsthetic judgements. His language about the beautiful as a symbol of the morally good is meant only to call attention to analogies, in the strict sense, between two radically distinct mental attitudes.] **A. de Ivanka.** *La connaissance intuitive chez Kant et chez Aristote (concl.)*. [The thought both of Aristotle and Kant leads up to the conception of a divine "intuitive understanding" (though Aristotle himself seems insufficiently alive to the implications of the concept). But the necessity of the conception remains for Kant subjective in consequence of his view of the constitution of knowledge by the imposition of "forms" of intuition and "categories" upon the purely amorphous "manifold of sense". Aristotle regards the presence of an "eidetic" pattern within the sensible object as a primary datum, and the exigence of a complete integration of all that appears "accidental" in the particular object in an "eidetic" pattern embracing the whole of the given, as also inseparable from the primary doctrine. Hence, just because with him the funda-

mental unity of the perceived reality is antecedent to any imposition of "forms" which are the "work of the mind," the whole subsequent development is throughout objective, and there is no doubt about its "extra-mental" validity. The two positions have in common the thought that "our knowledge presupposes an understanding which groups the data of sense in their original intelligibility, in a single act, without composition or succession." **A. de Poorter.** *Un recueil peu connu de questions sur les Sentences.* [Catalogue of contents of a MS. in the library of Bruges.] **L. Noël.** *La constitution de S.S. Pie XI sur la réforme des études ecclésiastiques. Chronique de l'institut supérieur de philosophie. Travaux de la société philosophique de Louvain.* **G. Legrand.** *La théorie de l'état.* [Abstract of the contents of Vol. II. of *Traité général de l'État* of M. de la Bigne de Villeneuve.] **J. Dopp.** *Quelques ouvrages récents d'histoire de la philosophie moderne.* Reviews. *Chronique.*

ERKENNTNIS. Band 2, Heft 1 (*Annalen der Philosophie*, Band x., Heft 1). **E. von Aster and Th. Vogel.** *Kritische Bemerkungen zu Hugo Dinglers Buch "Das Experiment".* [Dingler's contention that the data of physics can be thought only in terms of Euclidean geometry and Newtonian mechanics, on the ground that these are natural elaborations of the *a priori* forms of thought, is rejected in the light of both general methodological considerations and specific scientific problems.] **Hugo Dingler.** *Ueber den Aufbau der experimentellen Physik.* [Reply to preceding. Dingler explains that a metaphysic like his own, which aims at being a logically coherent system of concepts, is amenable only to immanent criticism: objections based on any historically conditioned stage of a particular science have no relevance to an absolute scheme of thought-necessities.] **Hans Reichenbach.** *Schlussbemerkung.* [Concludes above discussion with the ruling that the philosophy of matter cannot be reduced to a set of definitions logically developed; all principles must be subjected to the control of experience.] **E. F. Freundlich.** *Die Frage nach der Endlichkeit des Weltraums, als astronomisches Problem behandelt.* [The question whether the universe is finite or infinite cannot be answered from general philosophical principles. The theory of Relativity has removed the question to the province of physics by stating it in a form that admits of an unambiguous answer on the basis of experienceable facts. The facts point to a finite world, though this answer is not yet proved.] **Hans Reichenbach.** *Zum Anschaulichkeitsproblem der Geometrie.* [Reply to criticisms by Oskar Becker of the author's book *Philosophie der Raum-Zeit-Lehre*. The chief tenet of the latter is that the supposedly intuitive evidence of geometrical diagrams is really logical in character, for the proof follows from the tacit assumption that the diagram is so-and-so (that is, from the definition of the figure, which the diagram may or may not accurately represent).]

Heft 2-3. The whole number is devoted to a report of the Second Conference on the Epistemology of the Exact Sciences, held at Königsberg in September, 1930. It contains four papers, and the consequent discussion, on the foundations of Mathematics, with an appended bibliography, and two papers with discussion and bibliography on causality in current physics. The papers are: **R. Carnap,** *Die logistische Grundlegung der Mathematik.* **A. Heyting,** *Die intuitionistische Grundlegung der Mathematik.* **J. von Neumann,** *Die formalistische Grundlegung der Mathematik.* **O. Neugebauer,** *Zur vorgriechischen Mathematik.* **H. Reichenbach,** *Der physikalische Wahrheitsbegriff.* **W. Heisenberg,** *Kausalgesetz und Quantenmechanik.*

VIII.—NOTES.

CONCERNING IDENTITY.

IN the October number of this journal (p. 533) Prof. Joachim asks a question arising from my recent articles on the philosophy of Bosanquet. Perhaps I may be permitted first to restate the point I sought to touch upon.

Bosanquet (I take it) holds that the universal, properly regarded, is individual, and is therefore concrete; and that only the individual is truly identical. In my articles I argued that, without denying the identity of the individual or continuant, the identity of a type ought also, in an adequate theory, to be admitted. I deny that any 'identity' is concrete, for, as it seems to me, the 'identity' of an individual (which is not its individuality or its nature) is no less abstract than the 'identity' of a type. To express the view that there are identical types and identical individuals I adopted the phrase 'two types of identity'. I straightway confess that the phrase is not a happy one.

As I conceive it 'identity' is a category, not of existence, but of reflection; that is, it arises only where *recognition* is involved. The *ontological* interest is not in 'identity', but in 'nature'. Since thought (and language) is of the concrete rather than of the abstract, the proper expression of the fact of 'identity' is by the term 'same' or 'identical': identity is essentially adjectival.

In saying that in a selected instance we are presented with the same type as in some other instance, we are asserting that certain judgments which are true of the one instance are also true of the other. This is what justifies us in saying that the two instances are instances of the *same* type. Likewise when we say that an individual is the same irrespective of accidental difference, of temporal or spatial change, we are asserting that certain judgments which are true of what was previously experienced, are also true of what is now presented. This is what justifies us in saying that what is experienced is an individual, meaning thereby a continuant which we have encountered with such and such successive, different characters. In thus speaking of the *same* type and of the *same* individual, we are not debarred from recognising that the type, as being a type, has a recurrent mode of existence, and that the individual, as being an individual, has a continuant mode of existence. There is no 'identity' involved (in either of these cases) beyond that above asserted. My contention is that the answer to the *logical* question has not predetermined the *ontological* answer in favour of the individual, to the exclusion of any other mode of unity and of existence.

RALPH E. STEDMAN.

DR. JOHNSTON'S EDITION OF THE *COMMONPLACE BOOK*.

ADDITIONAL CORRECTIONS.

In addition to the errors corrected in the October number of *MIND* (pp. 455-8) the following should also be noted :—

MS. J.

- 97-101. p. xvii Statutes. 5 pp. not (4 pp.).
 151 311 "that passive reception of ideas" not "recognition".
 151 314 "dusk" not "dark".
 153 329 "Is it not impossible" not "It is not . . ."
 158 368, 369 Should not 369 precede 368 ? (368 within < >).
 12 451 "Truly number is inmoveable" not "immensurable".
 27 516 "set forth how that the . . ." J. omits "how".
 27 519 "weh contains as many points" not "the same points".
 28 520 "Ask a man non (?) tainted".
 34 550 "consists in relation" not "relations".
 38 569 Surely "Bacon's remark" not "Barrow's".
 39 576 "but instead of them to use perception" not "instead of sensation".
 41 587 (i) "but that thing weh perceives" not "not that thing . . ."
 (ii) "These are vague, empty sounds without a (word illegible)" not "These are vague and empty words with us".
 44 600 "I answer by shape, by Language." Should not this read "I answer, by shape. By Language rather by degrees of more & less" ?
 46v 624 "This altered hereafter" not "allow'd".
 51 649 "The like distance" not "difference".
 55 673 "for that were a contradiction of them". Last two words (almost illegible) omitted by J.
 56 677 "The truth in't is they stand. . . ." Not "really".
 61 704 "desire, aversion . . ." not "exertion".
 62 707 "eternity of space. The possibility . . ." not "space and the . . ."
 66 732 "where we cannot" not "when".
 67 736 "in his or ye Schoolmen's sense" not "and the Schoolmen's. . . .".
 68 744 The omitted words after "of sensible Ideas" are "pro hic & nunc".
 70 757 "Both all the perceptions." The first word is not "Both". The initial letter is "R". "Res (?)".
 71 759 "Brutes have ye ideas, Unity & Existence" not "ideas of Unity . . ."
 75 783 "may not be properly reckon'd" not "properly be reckon'd".
 75 788 After "I" add "M".
 80 813 "I differ from the Cartesians". J. omits "the".
 83 823 "stick to their own principles or cant of existence" not "causes".
 88 854 "sort of ideas is essential to (me)" not "sort of ideas being essential".
 90 860 "I must not mention". J. omits "not".
 91 868 "Yet . . . we may term them causes" not "call them causes".
 164v 950 "examination not determin'd" not "examination is not . . ."

These additional errors were pointed out to me by Mr. A. J. Watson of the British Museum, and I thank him very cordially for the kindness. I have verified them from the MS. and agree with him in respect to each correction.

Capt. the Rev. A. A. Luce of Trinity College, Dublin, has suggested the possibility that the Latin quotation together with the words "13c. Math. v. 22 & 30" which I inserted after J. 7 are not in Berkeley's handwriting. After examining the MS. carefully I am inclined to accept the suggestion. If it be accepted, of course, they are not to be included in the text of the *Commonplace Book*. I thank Capt. Luce also for drawing my attention to this possibility.

R. I. AARON.

CARVETH READ (1848-1931).

THE death on 6th December of Carveth Read, at the advanced age of eighty-three years, removes from our midst one of the oldest, if not the oldest, of the contributors to *MIND*. He was a member of the band of workers upon whom Croom Robertson relied to supply material for the new venture begun in 1876; in the July number of 1877 he gave an account of the results he had reached in regard to the scope and function of the science of Logic. And in subsequent numbers he wrote articles, criticising, with acuteness and originality, metaphysical theories then in the ascendant, such, for instance, as Shadworth Hodgson's "philosophy of reflection".

Carveth Read was born in 1848 at Falmouth, the son of Nonconformist parents of liberal views. His early school education led him into the fields of natural history and physical science, an interest he retained throughout life. In the days when John Venn and Henry Sidgwick were prominent Cambridge teachers, he became a student of Christ's College; and, after graduation, he obtained a Hibbert travelling scholarship, which enabled him to continue his studies in Germany for two years, first at Leipzig under Wundt, and then at Heidelberg under Kuno Fischer. His earliest book, an essay *On the Theory of Logic*, published in 1878, was the outcome of his work at these Universities. Its aim was, on the one hand, to restore to logic what he called the synthetic order of exposition; and, on the other hand, to give an outline of the science from what he described as the 'matter of fact' point of view, as formulating, in other words, the most general laws of correlation among existents, whether objective or subjective. Venn, who reviewed it at considerable length in *MIND*, spoke of it as a "very thoughtful and suggestive essay". It was followed twenty years later, in 1898, by the text-book on *Logic: Deductive and Inductive*, a treatise which went through several successive editions, and which has been widely used in University teaching. In the main, Read's exposition ran on the lines laid down by Mill, but it was characterised by much original and independent thinking.

After lecturing for many years at Wren's establishment, Carveth Read was appointed in 1903 to the Grote Chair of the Philosophy of Mind and Logic in University College, London, as the successor of James Sully, a position which he occupied until his retirement in 1911. He continued, however, to lecture on comparative psychology at the college until 1921. It was during his tenure of the Grote Chair that he published his two chief philosophical works, *The Metaphysics of Nature* in 1905, and *Natural*

and *Social Morals* in 1909. In the former, which is written with much freshness and vigour of style, a resolute effort is made to combine a sound empiricism with the recognition of a transcendent reality. In our own consciousness, it is contended, we are immediately aware of an ultimate reality, while empirical reality is a manifestation of ultimate reality in a system of phenomena. Consciousness is the universal activity of Being; but the whole of reality is not exhausted by consciousness, and the remainder is to be conceived as transcendent, interpretable partly through the laws of phenomena which represent it objectively, and partly from the laws of consciousness, which is ultimately real, and not representative of something beyond itself. Finally, in the book entitled *The Origin of Man and of his Superstitions*, published in 1920, a second edition in two separate volumes appearing in 1925, Professor Read brought his researches in comparative psychology to bear upon human evolution, both in a biological and psychological sense.

Carveth Read was a man for whom all who knew him had sincere regard and affection. Absolutely devoid of any touch of self-seeking, modest and unassuming in the highest degree, and ever desirous of helping others, he won the personal esteem both of his colleagues and of his students. His wide knowledge of literature, combined with an ironic humour for which he had a peculiar gift, helped to make him a delightful companion; and he possessed the rare capacity of finding points of interest in everybody. His friends feel the world to be poorer now that he is no longer here.

G. DAWES HICKS.

MIND ASSOCIATION: ANNUAL MEETING AND JOINT SESSION WITH THE ARISTOTELIAN SOCIETY.

THE **Annual Meeting** of the Mind Association will be held this year at the University, Reading, at 5 p.m. on Friday, 8th July.

It will be followed by a **Joint Session with the Aristotelian Society**, for which the following arrangements have been made:—

FRIDAY, 8TH JULY.

8 p.m. Chairman: Miss L. S. Stebbing.

Address by Prof. W. G. de Burgh.

SATURDAY, 9TH JULY.

10 a.m. Chairman: Prof. J. A. Smith.

Symposium: "What is Philosophy?" Mr. J. Wolfenden, Prof. F. C. S. Schiller, Prof. J. Macmurray.

8 p.m. Chairman: Prof. G. Dawes Hicks.

Symposium: "Phenomenology." Mr. G. Ryle, Mr. H. A. Hodges, Mr. H. B. Acton.

SUNDAY, 10TH JULY.

10 a.m. Chairman: The Provost of Oriel.

Symposium: "Is Goodness a Quality?" Prof. G. E. Moore, Mr. H. W. B. Joseph, Prof. A. E. Taylor.

8 p.m. Chairman: Prof. S. Alexander.

Symposium: "The Limits of Psychology in Aesthetic Theory." Dr. L. A. Reid, Mrs. Helen Knight, Mr. C. E. M. Joad.

Accommodation will be provided in halls of residence adjacent to the University. Meetings will be held in the University, and by the courtesy of the Stewards lunch and dinner will be served in the Senior Common Room in the University. The charges will be: Bed and Breakfast, 6s.; Lunch, 1s. 9d.; Dinner, 3s. 6d., making an inclusive charge for the week-end of 32s. Tea will be available at a small extra charge.

There will be a charge of 10s. as a Registration Fee for Membership of the Joint Session. The papers will be published by the Aristotelian Society as a Supplementary Volume, which will be sent free of charge to all who have paid the Registration Fee. It is hoped that the volume will be ready in time to be distributed before the opening of the Joint Session.

In order to facilitate the arrangements, it is requested that applications for membership and accommodation should be made as early as possible. Payment of the Registration Fee and of the charge for accommodation should accompany applications, which should be addressed to—

A. W. WOLTERS, Esq.,
The University, Reading.

TO THE EDITOR OF "MIND".

AN APPEAL.

UNIVERSITY OF THE WITWATERSRAND,
JOHANNESBURG,
22nd February, 1932.

DEAR SIR,

A disastrous fire, during the night before Christmas Eve, destroyed a large portion of the Library of the University of the Witwatersrand, including many Philosophical and Psychological books.

The contents of the Library were only partially covered by insurance; and the prevailing depression makes it difficult to find the money for promptly replacing the losses.

May I, in these circumstances, appeal through the pages of "MIND," to all fellow Philosophers and Psychologists, and especially to my friends and colleagues at British Universities, to help me in building up again, as soon as possible, an adequate collection of books for my students?

Every gift of authors' copies or of duplicates—addressed to The Librarian, University of the Witwatersrand, Johannesburg, South Africa—will be gratefully acknowledged, and the donor's name, together with the occasion of the gift, will be recorded in the books themselves.

Yours faithfully,

R. F. ALFRED HOERNLÉ,
Head of the Department of Philosophy.

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